

## Welcome

# Charleston Defense Contractors Association 58th Small Business and Industry Outreach Initiative Symposium – Virtual

15 July 2021



# Ms. April Nadeau President, Charleston Defense Contractors Association

**Welcome and Opening Remarks** 

## **CDCA Officers**



April Nadeau President



Gary Jaffe Vice President



Manny Lovgren Treasurer



Beth Meredith Secretary



For a listing of all of your Board of Directors: <a href="http://www.charlestondca.org/about-overview-page">http://www.charlestondca.org/about-overview-page</a>

## CDCA Board of Director Elections

- The CDCA will be seeking candidates to serve on its Board of Directors.
- A Call for Nominees will go out in October 2021. Voting for the 2021 Board
  of Directors will begin in November 2021 and the winners will be announced
  at our Annual CDCA Defense Summit in December.
- You can help CDCA continue to advance its mission to advocate for, preserve, strengthen and grow the Charleston defense industry through partnerships and collaboration with stakeholders and our community. With the Strategy for 2025 being implemented, to include more partnering with NIWC and the State, and many new ideas on the horizon; CDCA needs and welcomes the enthusiastic participation of its members on the Board of Directors.
- Nominees must work for one of our Corporate or Platinum members in good standing. If you are not a Corporate or Platinum member, you can upgrade your company membership if you want to serve on the Board of Directors. Email membership@charlestondca.org to find out how.
- Our current Board of Directors can be found at the following link:





http://www.charlestondca.org/committees

#### Do you...

- Enjoy being creative and brainstorming with others?
- Enjoy seeing your work in action?
- Want to make a difference in our defense community / industry and learn more about it?
- want to gain leadership experience?
- Want to make new business contacts?

Then volunteering with CDCA is for you!

See our "<u>About</u>" tab for a description of committees with contact information.

## Join the CDCA Today!



## Why Join the Charleston Defense Contractors Association?

The CDCA is the premier advocate for the Charleston Defense contractor industry.

The CDCA mission is to advocate for, strengthen and grow the Charleston Defense industry through partnership and collaboration with stakeholders and our community. The CDCA supports the Defense community at large and represents the defense community with NIWC and other government agencies in the Lowcountry. We seek to provide liaison through effective communication avenues and represent the Defense contractor community in forums with these Government agencies.

Membership in the CDCA enables each Defense contractor with business interests in the Lowcountry the opportunity to support the Defense community. CDCA also provides input on issues and initiatives to the broader community in areas such as education, small business mentoring, and Congressional liaison. The CDCA works with the Charleston Metro Chamber of Commerce. CDCA fills and important need to speak with one trusted voice for the Defense-related technology C4ISR segment of the regional business community.

Individual	Preferred Service Vendor (non-Defense Industry)		Small Business	Corporate	Platinum
\$250.00	\$500.00		\$500.00	\$1,000.00	\$2500.00
1 designated POC	2 designated POC		2 designated POC	3 designated POC	5 designated POC
Complimentary attendance to SBIOI	Complimentary attendance to SBIOI for 2 employees		Complimentary attendance to SBIOI for 2 employees	Complimentary attendance to SBIOI for 5 employees	Complimentary attendance to SBIOI for all employees
Member Name, Email & Phone Number in the Member Index	All Company info and logo on CDCA Website		All Company info and logo on Member Index	All Company info and logo on Member Index	All Company info and logo on Member Index and Homepage
\$25 Discount for annual CDCA Defense Summit registration	\$50 Discount per attendee registration for annual CDCA Defense Summit		\$50 Discount per attendee registration for annual CDCA Defense Summit	\$75 Discount per attendee registration for annual CDCA Defense Summit	\$100 Discount per attendee registration for annual CDCA Defense Summit
* Individual Meberships are non- transferrable	Discounted Sponsorship rate for Summit		Discounted Sponsorship rate for Summit	Discounted Sponsorship rate for Summit	Eligible for \$1000 Summit Sponsorship discount (Gold Sponsorship or higher)
		r information displayed ising brochure	Eligible for Contracts Industry Council	Eligible for Contracts Industry Council	Eligible for Contracts Industry Council
				Eligible to sit on Board of Directors	Eligible to sit on Board of Directors
Please Note:  All members are eligible to: - Volunteer on Commitees				Eligible to apply for Summer Intern Program	Eligible to apply for Summer Intern Program
				Eligible to vote (BOD Elections, Bylaws, etc.)	Eligible to vote (BOD Elections, Bylaws, etc.)
- Co-Chair a Committee All designated POCs get:				Company Logo Displayed on member slideshow at SBIOI	Company Logo Displayed on member slideshow at SBIOI
<ul> <li>Access to Member Index on the v</li> <li>Contact information listed on we</li> </ul>					Ability to introduce Speaker
<ul> <li>Added to CDCA email distribution list (POCs distribute to rest of company if Preferred Services Vendor level of higher)</li> </ul>		Join now at charlestondca.org/join-us-overview			Company Logo Displayed on slideshow in lobby at SBIOI

# CDCA Member Training Opportunities



CDCA Education Committee is continuing to offer training programs targeted to your feedback!

Ourrent offerings are focused on Project Management, Systems Engineering and Leadership Development.

Please visit the CDCA website Education Tab for all the details.

For more information go to the Education tab at:

https://www.charlestondca.org/

• **Subject**: Virtual Instructor-Led Short Courses for CDCA Members

• Format: All courses are 4-hour training sessions, delivered via Microsoft Teams 4:30pm – 8:30 pm ET except for the PMP

**Exam Prep Courses** 

• **Pricing**: Individual Sessions: \$99/Session or \$89/Session with CDCA Member discount code.

 PDU/CLP: 4 PMI Professional Development Units (PDUs) and Continuous Learning Points (CLPs) will be awarded for each session.

# Contracts Industry Council "CIC"

Purpose: To increase the degree of integration and quality of the business partnership between Naval Information Warfare Center, Atlantic (NIWC Atlantic) and Industry.

Welcome to the newest CDCA CIC Representative: Sallie Sweeney, from KPMG



Date	Sponsor	Size	Representative	
January 2022	CDCA	Small	Camila Anderson	Bowhead
June 2022	NCMA	Large	Scott Varn	SRC
January 2023	NCMA	Large	Lana Thomas	BAE
June 2023	CDCA	Small	Malcolm Potts	Amee Bay
January 2024	AFCEA	Large	Linda Resler	SAIC
June 2024	CDCA	Large	Sallie Sweeney	KPMG
Industry Team Leader	Special Member	Large	Manny Lovgren**	Sentar

Learn more about the "CIC" on the CDCA website:
<a href="http://www.charlestondca.org/about-the-cic">http://www.charlestondca.org/about-the-cic</a>



Who: YOU!

What: CDCA's 59th SBIOI

When: Tuesday, October 19, 2021

Where: Trident Technical College

\* Registration will open in September 2021

The Small Business Industry Outreach Initiatives (SBIOIs) would not be possible without the dedication and true collaboration of government and industry between the leadership of NIWC Atlantic and the CDCA.

We truly value this cooperative partnership and are delighted to continue providing events to both new and old industry partners looking to contract with NIWC Atlantic.



Email: <a href="mailto:sbioi@charlestondca.org">sbioi@charlestondca.org</a> or go to <a href="https://www.charlestondca.org/cdca-59th-sbioi">https://www.charlestondca.org/cdca-59th-sbioi</a> for more information

## Save the Date

for the 14th Annual

## CDCA DEFENSE SUMMIT



## December 7-9, 2021

Charleston, SC

Charleston, SC

## TO REGISTER VISIT:

charlestondca.org/cdca-summit-14

Interested in sponsoring? Email sponsors@charlestondca.org

# Register by 12 Oct 2021 to get the Early Bird Rate!

Dec. 7th-9th 2021 Charleston, SC



**REGISTRATION FEES:** General Registration:

- \$500 Early Bird (register before October 12, 2021)
- \$600 Advanced (register between October 12 and December 6, 2021)
- \$650 On-Site (register after December 6, 2021)
- CDCA Members receive a discount
   (email: registration@charlestondca.org to get your member discount code)
- Government & Media receive complimentary registration
   (email: registration@charlestondca.org to get your complimentary code)

Some sponsorships and volunteer opportunities come with a complimentary registration, so be sure to check them out.

Email: <a href="mailto:registration@charlestondca.org">registration@charlestondca.org</a> or go to <a href="https://www.charlestondca.org/cdca-summit-14">https://www.charlestondca.org/cdca-summit-14</a> for more information on registration

## These Sponsorship Opportunities are still available:

- Mobile App Sponsor
- The Hub Sponsorship
- Speaker Reception Sponsor
- Networking Happy Hour (1 left)
- Aisle Sign Sponsorship (2 left)
- Media Lounge Sponsor
- Parking Sponsorship
- Swag Bag Sponsor

- Registration Sponsor
- Breakout Panel Sponsorship
- Keynote Speaker Sponsorship (2 left)
- Gold Sponsorship
- Silver Sponsorship
- Bronze Sponsorship
- Speed Networking Sponsorship

email: sponsors@charlestondca.org
or go to
<a href="https://www.charlestondca.org/cdca-summit-14">https://www.charlestondca.org/cdca-summit-14</a>

for more information on sponsoring.





# 2021 CDCA Defense Summit Sponsors

Thank you to those who have already signed up to Sponsor at the 14<sup>th</sup> Annual CDCA Defense Summit.

Email: sponsors@charlestondca.org or go to

https://www.charlestondca.org/cdca-

summit-14 for more information on sponsoring.

#### **Titanium Sponsors:**

- Life Cycle Engineering
- SAIC

#### **Collaboration Session:**

McAfee

### **Main Stage Sponsor:**

CACI International

### **Gold Sponsors:**

- Booz Allen Hamilton
- GRSi
- KBR
- Quest Public Sector
- Rubrik
- Scientific Research Corporation
- · Sentar, Inc.
- WR Systems

#### **Keynote Sponsor:**

- Peraton
- Red Hat, Inc.

## Attendee Lanyard Sponsor:

Akima

#### **Innovation Pitch Jam Stage Sponsor:**

Advanced Technology International (ATI)

### **Networking Happy Hour Sponsor:**

- ITC Defense
- ManTech

#### **Silver Sponsor:**

- Information Warfare Research Program (IWRP)
- Systems Technologies, Inc.

#### WiFi Sponsor:

Resource Management Concepts

### **Hand Sanitizer Sponsor:**

Bowhead

#### **Q&A Sponsor:**

Indus Technology, Inc.

#### **Hydration Station Sponsor:**

Systems Technologies, Inc.

#### **Breakout Panel Sponsor:**

• Elasticsearch, Inc.

## **Aisle Sign Sponsor:**

Lyme Technology Solutions



# Innovation Pitch Jam Prize Challenge

Go to
<a href="https://www.charlestondca.org">https://www.charlestondca.org</a>
/cdca-summit-14 for more
information.

CDCA Defense Summit is one of the largest defense-focused events on the East Coast, bringing together more than 1,000 Government, Military, Academia and Industry leaders to spark ideas, innovation, and solutions to our current and future National Defense digital challenges. This year marks the third annual pitch competition to be featured at the Defense Summit, December 7-9, 2021.

This year's pitch jam will have enhanced Government participation as the pitch topics will be derived from a Government prize challenge. Companies down-selected by the Government will give two presentations during the week of the CDCA Summit.

#### The Mechanics:

- Government determines 2 topics which will be announced on Challenge.gov
- Interested industry participants submit a brief whitepaper detailing their solution
- Government down-selects 5 companies for each topic
- Down-selected companies give 2 presentations at the CDCA Defense Summit
  - 1. Private, "one-on-one" presentation to the Government
  - 2. Live presentation on stage in the exhibit hall of the Summit
- Awards
  - 1. Government No guarantee of a Government award, but Government stakeholders will have options for getting funding to any solution they see fit
  - 2. Summit Summit attendees will view the live presentations and "vote" for the solution they feel is best for each topic. The solution with the most votes will receive the CDCA Summit "People's Choice Award"

Charleston Defense
Contractors Association
has selected
Judge Public Relations
to represent CDCA
and our events.



 Judge Public Relations, a PR firm and marketing agency headquartered in Tampa, Florida, began by specializing in defense, counterterrorism and technology, and now also represents clients from a variety of different industries.



• "The CDCA members and their networking events are absolutely critical when it comes to ensuring the leaders of our military and our allies have the ability to share ideas with those who are in charge of creating the latest technology, munitions and equipment to support our national security," said James Judge, CEO of Judge PR and a former public affairs specialist for the U.S. Department of Defense, NATO and the U.S. Coast Guard.



## Ms. Elizabeth Stober

Co-Chair, Education & Workforce Development
Committee
Charleston Defense Contractors Association

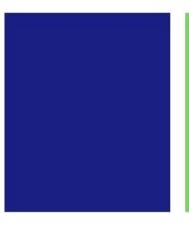
CDCA Cybersecurity Apprenticeship Program and CDCA Member Training Opportunities

# CDCA Cybersecurity Apprenticeship Program

In partnership with Apprenticeship Carolina, Trident Technical College (TTC) and Horry Georgetown Technical College (HGTC), CDCA has two Cybersecurity Apprentice tracks that align with the NIWC labor categories:

- Cybersecurity Specialist 1
  - Certificate and Associates Degree programs at TTC and HGTC
- Cybersecurity Specialist 2
  - Bachelor Degree with Cybersecurity focus from Accredited College/University
- Both TTC and HGTC have education funding for Youth 16 to 18 years old
- Both TTC and HGTC are actively recruiting and enrolling youth for the 2021-2022 term
- Email <u>education@charlestondca.org</u> for additional information





For more information go to the Education tab at: charlestondca.org



# Youth Apprenticeship Information Technology Program



#### About the Program:

Recognizing industry's demand for more skilled labor in the region coupled with a need for an alternative career pathway for high school students, community leaders in Charleston came together to establish a sector partnership and develop the region's first United States Department of Labor (USDOL) Youth Apprenticeship Program.

The sector partnership includes high schools in all four school districts, Trident Technical College and a consortium of Industry Partners. It represents a community-wide collaborative approach to developing a comprehensive career pathway that provides a seamless transition for students from secondary to post-secondary education into the skilled workforce.

Program Lifecycle Connecting Students to Employers

#### Youth Apprenticeship (Partnership)

Student graduates with diploma, college certificate and DOL journeyman credentials



Student begins employment (OJT) while taking high school and dual credit courses



**Employer expresses** 

interest in Youth

Apprenticeship and

contacts TTC, who will

notify high schools and

advises students of opportunity during



Employer interviews and hires students for apprenticeship



Student expresses interest in apprenticeship model



TTC connects qualified students with employer





## YOUR FUTURE WORKFORCE TODAY

The Youth Solution

Help mentor the next generation and train the Lowcountry's workforce of tomorrow.



#### **Employer's Role:**

- Hire the apprentice and allow him/her to work part time throughout the school year and full time during the summer
- Oversee apprentice's on-the-job training
- Evaluate apprentice's progress before recommending advancement to the next pay level
- Recommend Award of Completion certificate when an apprentice has satisfactorily completed the required course work and on-thejob training
- Commit to retain employee for duration of apprenticeship

#### **Partnership Benefits:**

- Work with educators to develop curriculum based on industry needs
- Recruit and screen potential employees
- Improve competitiveness in the global marketplace
- Qualify for a \$1,000 tax credit per apprentice
- Workers compensation coverage of the apprentice is provided by TTC
- All tuition, books and other fees are covered by the Charleston Metro Chamber of Commerce.

#### **Become an Industry Partner**

We are seeking additional Industry Partners to participate in the apprenticeship programs.

One youth...that's all it takes for a company to become an Industry Partner...hire one youth.

For more information on how you can get involved, contact the CDCA Education & Workforce Development Committee at education@charlestondca.org



# Mr. Pete Van Chair, CDCA Small Business Committee

Introduction of Agenda and Speakers



10:15	Introduction of Agenda and Speakers	Pete Van, Chair, CDCA SB Committee
10:20	NIWC Atlantic Command Update	CAPT Wesley Sanders, USN, NIWC Atlantic Commanding Officer
11:00	USCG Charleston Super Base Update	Rear Admiral Kevin Lunday, Deputy Commandant for Mission Support - Deputy for Material Readiness (DCMS- DMR)
11:45	Q&A Session	
12:00	Break	
12:15	Competency and S&T Department Overview	Dr. Suzanne Huerth, SSTM S&T Competency Director
	ONR, Advanced Technology Research and 5G Project Update	Dr. Suzanne Huerth, SSTM S&T Competency Director
	Rapid Prototyping and Experimentation"	Greg Hays, SSTM
	DARPA Project Update	Brad Knaus – DARPA IPT Technical Lead

1:45	Q&A Session	
2:00	Break	
2:55	NIWC Atlantic Contracts Update and Industry Forecast Report	Steve Harnig, 2.0 Contracts Competency Director
3:00	NIWC Atlantic Small Business Opportunities	Robin Rourk, Office of Small Business Programs Deputy
3:15	Q&A Session	
3:30	Closing Remarks and Announcements	Camila Anderson, Co-Chair, CDCA Small Business Committee

Please contact the CDCA Operations Executive, Paula Callahan, at paula@charlestondca.org if you have any questions or would like to become a member of the CDCA.





# Naval Information Warfare Center Atlantic Ensuring The Fleet Can Fight Tonight

Charleston Defense Contractors Association
58th Small Business and Industry
Outreach Initiative Virtual Symposium

15 July 2021

Captain Wesley Sanders, USN
Commanding Officer
NIWC Atlantic



# ... America's need for sea control and power projection hasn't changed,

## how we compete and what we fight with has. NAVPLAN 2021



We develop the networks, infrastructure, data architecture, tools and analytics that will enable our sustained maritime dominance.



# Providing the Naval Force with the most advanced C5ISR capabilities available

## Forward Based/Forward Deployed for pron-time delivery — READINESS



- ▼ 5,089 (4,969 Gov't, 120 Mil) ~9,000 from Industry Ready to surge
- Bringing Innovation Hubs and academia together for collaboration, hiring and learning
- All platform, systems and capabilities, Afloat and Ashore

Aircraft Carriers — Aircraft — Amphibious Ships — Command Ships — Undersea Manned and Unmanned Systems — Vehicles and Land Platforms

▼ Strengthen network infrastructure, improve security, reduce hardware footprint and decrease total ownership costs.











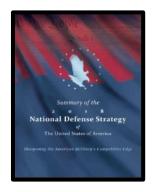
## NIWC Atlantic Unique Labs and Technical Capabilities

- National Cyber Range Complex
- Surface Ship Test and Integration Facility
- PNT Lab and Network Integration Engr. Facility/CANES
- Common Submarine Radio Room
- NIWC Atlantic National Security Operations Center/ NAVWAR Red Team (NSA, USCYBERCOM and DOD Cyber Red Team Accredited)
- Electromagnetic and Interference Testing Facility Poseidon Park
- Environmental test labs
- Marine Corps Installations Command Electronic Security Systems
- 5G Comms. Capability and Outdoor Optical Range
- Cyber Forensics Criminal Investigations Laboratory
- Cyber Computer Network Defense Laboratory
- DOD Component Enterprise Data Centers and Networks and Satellite Comms Gateways
- Software Defined Radio & RF Testing, Commercial and DOD Satellite Comms production and installation
- Small Autonomous Unmanned Systems Range (SAUSR)
- Seaworthy Artificial Intelligence Lab (SAIL)
- Vehicle C4I systems integration, testing and production facility
- Global Distance Support Help Desk
- ATC development and installation

24



## **Optimizing Support to the Warfighter**



## National Defense Strategy

- Build a More Lethal Force
- Strengthen
   Alliances and Attract
   New Partners
- Reform the Dept. for Greater Performance and Affordability

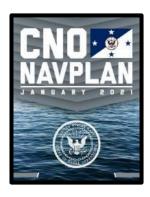
America's military has no preordained right to victory on the battlefield.



## Tri-Service Maritime Strategy

- Generate Integrated All-Domain Naval Power
- Contest actions that infringe upon the free and open use of the maritime environment.
- Control the seas
- Strengthen alliances and partnerships
- Develop a modernized naval force to compete, deter aggression, and, if required, decisively win in conflict

to prevail across a continuum of competition



#### **CNO NAVPLAN**

- Sailors: Develop a Seasoned Team of Naval Warriors
- Readiness: Deliver a More Ready Fleet
- Capabilities:
   Delivering a More
   Lethal, Better Connected Fleet
- Capacity: Deliver a Larger, Hybrid Fleet

what must be done this decade to deliver the naval power America needs to compete and win.



## 38th Commandant's Planning Guidance

- EABO/DMO/LOCE
- Warfighting
- Education & Training
- Core Values

Command &
Leadership
As good as we are
today, we will need
to be even better
tomorrow.



#### Force Design 2030

Steps to move the force design effort into the next phase.

- Divest to Invest
- Modeling and
  Simulation/Wargaming/
  Experimentation
- Stand In Force
- Naval Integration

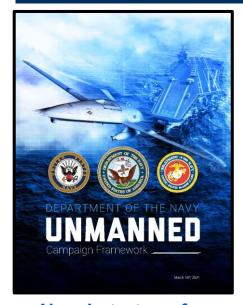
We must transform...to meet new desired ends, and do so in full partnership with the Navy.



# Department of the Navy Unmanned Campaign Framework

https://www.navy.mil/Portals/1/Strategic/20210315%20Unmanned%20Campaign\_Final\_LowRes.pdf

Moving with purpose to innovate and adapt new technology to build a more lethal and distributed naval force for the future... committed to investing in advanced autonomy, robust networks, and unmanned systems ... Thomas W. Harker, Secretary of the Navy (Acting)



Naval strategy for making unmanned systems a trusted and integral part of warfighting.

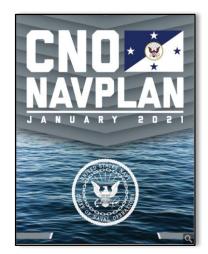
## **Five Goals**

- Advance manned-unmanned teaming effects within the full range of naval and joint operations.
- 2) Build a digital infrastructure that integrates and adopts unmanned capabilities at speed and scale.
- Incentivize rapid incremental development and testing cycles for unmanned system.
- 4) Disaggregate common problems, solve once, and scale solutions across platforms and domains.
- 5) Create a capability-centric approach for unmanned contributions (platforms, systems, subsystems) to the force.



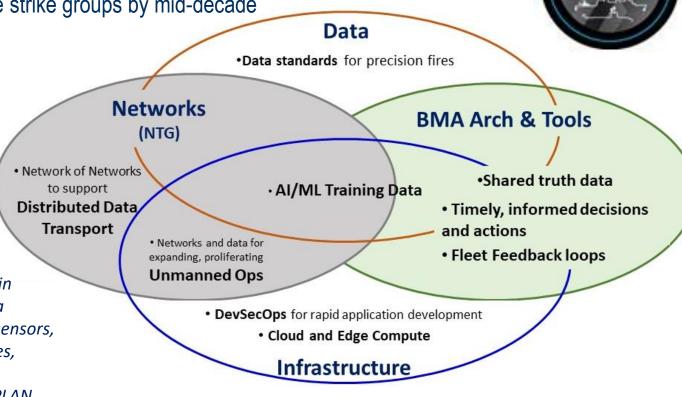
## **Overmatch**

- ▼ Aligning resources & expertise to field Naval Operational Architecture (NOA)
- Enabling Distributed Maritime Operations (DMO)
- Employing a core team to execute an agile approach with Fleet centric design
- ▼ Deploying on multiple strike groups by mid-decade



"We must close the kill chain faster than our rivals with a resilient web of persistent sensors, command and control nodes, platforms, and weapons."

~ CNO NAVPLAN



Minimum Viable Product Epic Testing ongoing in hardware/software in the loop environment



## **Enabling Joint Interoperability**

## JADC2

Joint All-Domain Command and Control

- ✓ Navy and Marine Corps Project Overmatch (tactical data network that link weapons and sensors)
- ✓ Air Force Advanced Battle Mgmt. System
- ✓ Army's Project Convergence



DCGS-MC

Making the systems we have work together and all future systems built work together

**Distributed Maritime Operations (DMO)** develops new fleet architecture using Al and manned/ unmanned teaming

Marine Corps Enterprise Network connects Marine end-users regardless of location, classification or mission

Enterprise DCGS-MC Integrated Backbone (DIB)
Services (EDS) provides the Marine Air/Ground Task
Force (MAGTF) with access to the DoD's DCGS
Enterprise and interoperability with the Army, Navy, Air
Force, Special Operations Forces, the Intelligence
Community and other federal agencies' DCGS systems.

**Hybrid Cloud and Data Center** optimizes application hosting and development while providing a foundation for all application owners through Enterprise Services

Enable tactical data networks — all environments, all mission areas



## Navigation and Communications during SATCOM Interference



**NoGAPSS** (Non-GPS Aided Position and timing (PNT) for Surface & Submarine) — Future Naval Capability

- Improves the resilience of the surface ship PNT suite in the absence of GPS.
- Pursues a versatile capability that will intelligently control the buildup of position and time errors.
  - Integrates alternative fixes/resets enabling individual ships to seamlessly make use of alternative PNT aiding sources
  - i.e., bathymetry, celestial/ terrestrial object tracks, true bearing transmitter etc.

Support includes MILSATCOM and COMSATCOM engineering



## Electronic Warfare and Cyber Operations — Protect/Defend

- ▼ We are a NSA Laboratory extension
  - NSA hardware, NCRC, multiple security levels, Connectivity Joint Information Operations Range
- Protecting Information Networks Across DOD agencies
  - Computer Network Defense Service Provider
    - Protects and monitors, enable defensive cyber ops and internal defensive measures
  - U.S. Cyber Command-accredited Cybersecurity Service Provider (CSSP) — 24x7
  - Leads DOD cyber operations program
  - Performs CSSP services for MHS GENESIS EHR and Med-COI network
- EW Innovation and Execution Lab
- ▼ Forensics Lab, the Navy's trusted Agent
- ▼ In-house, training/curriculum for the constantly evolving cyber domain

The National
Cyber Range
Complex (NCRC)
Charleston is a
DoD resource
that enables us to
train like we fight

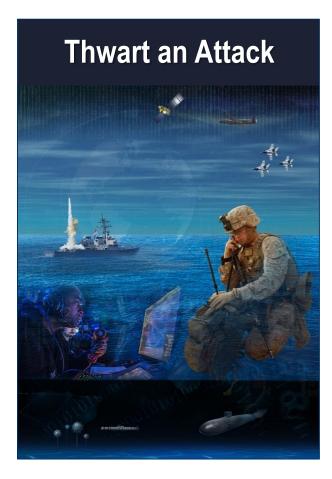
NCRC a DOD resource under the
purview of the Test Resource
Management Center

NCRC offers critical testing and evaluation of advanced cyberspace capabilities of ships, submarines, aircraft and vehicles for the Navy, industry and our joint coalition partners.

- In alignment with DoD needs, the NCRC offers realistic cybersecurity testing & training supporting the Cyber Mission Force certification
- Early identification of system vulnerabilities
- Mission Rehearsal, high-fidelity representations of cyber-contested environments, improves the resiliency of our warfighters in cyber contested battlespace



## **Enabling Timely, Informed Tactical Decisions**



- ▼ Implementing Consolidated Afloat Networks and Enterprise Services (CANES). The infrastructure and services required for the navy to dominate the cyber warfare domain.
- Moving networks in the cloud, increasing capability, security and affordability across the Naval Force.
  - Marine Corps Business Optimization Support Services (MCBOSS) enterprise cloud, supports the USMC digital modernization
- Agile software development to discover, subscribe, shape, filter, modify, and visualize data that aids Naval Force assessment of a situation
  - Rapid Response and Integration (R2I) Project, for the USMC Tactical Service Oriented Architecture (TSOA)
- ▼ C4ISR Systems At the Tactical Edge
  - Networking on the Move (NOTM)
  - Ground System (DCGS) MC
  - Communication Emitter Sensing and Attack System (CESAS)
  - Assured PNT

- Marine Electronic Warfare Ground Family of Systems
- Joint Light Tactical Vehicle (JLTV)
- Tactical SIGINT Collection System
- Joint Threat Warning System

Decisive military advantage in an area of great power competition



# Driving DoD Readiness — 3D Virtual Training Technology

# The ability to learn mission critical skills via a gaming software simulation makes it interesting and engaging

Delivered wherever and whenever it is needed via laptops or tablets

The first 3D trainer platform was developed to allow Sailors to train on submarine radio rooms virtually without having to set foot in a submarine.

This technology was leveraged to construct a virtual training system specifically designed for a Marine Corps Mobile User Objective System (MUOS) capability

The Common Submarine Radio Room Multi-Purpose Reconfigurable Training System (MRTS)

Virtual, touchscreen system, simulates the exact equipment submariners use aboard a boat

Expanding to support other DoD-wide capabilities



We deliver Innovative training and education for warfighting advantage



# Worldwide Connections Cybersecurity and National Defense



Accelerate mission ready capabilities to the Warfighter



Validate prototypes and hypotheses for unmanned solutions



Connect warfighters; link weapons, sensors and battle systems



Pivot, surge; deliver for global crisis



Fast Response and Polar Security Cutters



Worldwide Industrial Control Systems Engr. and technical support



Lead MILCON/C5I Integration for new MILCON projects worldwide



Navy Center of Engr.
Excellence for shore-based
ATC systems worldwide

Enabling information superiority across all warfare areas



# 8 Technology Focus Areas (TFAs) to Achieve Technology Goals

Technology
Strategy and
TFA analysis
drives work
acceptance and
lab/facility
infrastructure
allocations and
tools.





**Artificial Intelligence:** Provide warfighters with analytics-driven, data-informed, and technology-empowered capabilities to drive decision advantages and optimal mission outcomes.



**Assured Communications:** Addresses the demand for resilient, and sometimes covert, wired and wireless communications in degraded and/or denied environments.



**Cloud Computing:** IT modernization and digital transformation for resilient infrastructure, platform and software services.



**Cybersecurity**: Provides protection from unauthorized use of and/or defends electronic data, hardware, software from disruption or of the services they provide.



**DevSecOps:** Refers to replacing siloed Development, Security and Operations to create multidisciplinary teams that collaborate with shared and efficient practices and tools.



**Mobility:** Provide Wireless Technology and enterprise access for the warfighter to engage with a mobile environment and applications, anytime, anyplace.



**Model-Based Systems Engineering (MBSE):** Technologies used to support the development, management and application of virtual constructs of varying fidelity across the spectrum of systems engineering.



**On-Demand Manufacturing:** Produce products and/or components, when or as they are required at the point of use, using additive and/or traditional manufacturing methods.

34



## Advancing Naval Information Warfare Through Rapid Prototyping on a Global Scale

## IWRP is the first Naval Consortium to have successful prototypes transitioned to production.

Mission to foster collaboration between Government, Industry and Academia to identify, develop and demonstrate the enabling technologies necessary to enhance the Navy and Marine Corps mission effectiveness in the field of Information Warfare.

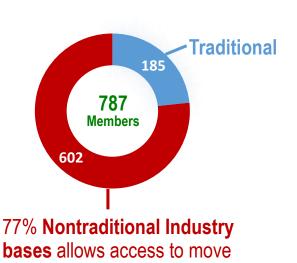
### **Membership Spans 37 States**



Since Oct FY19 1048+ Structured collaboration engagements between industry and the government

Become a member

https://www.theiwrp.org



innovative capabilities

**\$500M**Ceiling

85 prototypes (\$193M)

Awarded to Date

6 Production (\$253M)

Awarded to Date

69% (58 of 84)

Awarded to Non-Traditionals

\$2.3M

Average Prototype Award

47

Industry Day & CMF Events

## 10-day Exercise

(Apr.5-14, 2021 Camp Lejeune, N.C.)

**Naval Integration** in Contested **Environments** (NICE) Advanced **Naval Technology Exercise (ANTX)** 2021

Over 60 emerging technologies were evaluated by the Navy and Marine Corps for future warfighter application.























# Serve our Nation by delivering information warfare solutions that protect national security. WIN THE INFORMATION WAR.







NIWC Atlantic is part of the Naval Research & Development Establishment (NR&DE)

Web: <a href="https://www.niwcatlantic.navy.mil">https://www.niwcatlantic.navy.mil</a> Facebook: <a href="https://www.niwcatlantic.navy.mil">https://www.niwcatlantic.navy.mil</a> Facebook: <a href="https://www.facebook.com/NavalInformationWarfareSystemsCommand">https://www.facebook.com/NavalInformationWarfareSystemsCommand</a>
Twitter: <a href="https://www.linkedin.com/company/spawar/">https://www.linkedin.com/company/spawar/</a>
Glassdoor: <a href="https://www.glassdoor.com/Overview/Working-at-SPAWAR-Systems-Center-Atlantic-El IE638508.11,41.htm">https://www.glassdoor.com/Overview/Working-at-SPAWAR-Systems-Center-Atlantic-El IE638508.11,41.htm</a>
Employment opportunities: <a href="https://www.niwcatlantic.navy.mil/for-industry/">https://www.niwcatlantic.navy.mil/for-industry/</a>

NAVWAR Contract Directorate Office: https://e-commerce.sscno.nmci.navy.mil

### **Rear Admiral Kevin Lunday**

Deputy Commandant for Mission Support - Deputy for Material Readiness (DCMS-DMR)

USCG Charleston Super Base Update



## **Question and Answers**



## **Break**





# Naval Information Warfare Center Atlantic

Charleston Defense Contractors Association
58th Small Business and Industry
Outreach Initiative Virtual Symposium
15 July 2021

Dr. Suzanne Huerth, SSTM
Chief Technology Officer
NIWC Atlantic



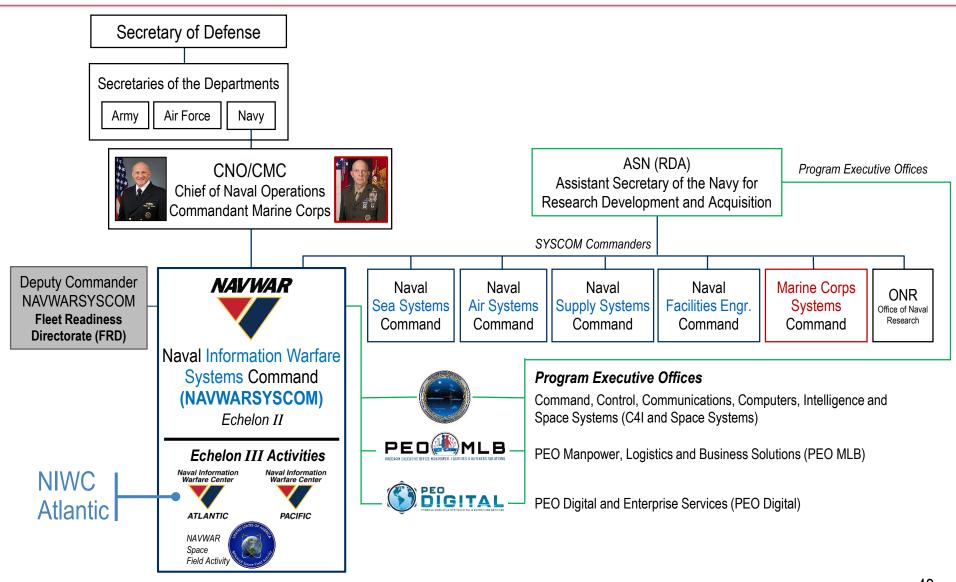
#### **NIWC Atlantic's Mission and Vision**

Mission: Serving our Nation by delivering information warfare solutions that protect national security. Includes: communication systems (radios), networking systems (routers/switches), cyber operations (red team/forensics/network defense), intelligence, surveillance, reconnaissance (sensors/decision support applications), business systems (benefits/personnel) and information security.





#### Where We Fit in the DON Structure



July 2020 43



## **Program Executive Offices**



#### ▼ PEO C4I and Space Systems

- Five program offices focused on capability development (100s)
- Five program offices focused on platform integration (700s)
- Command and control, intelligence sharing, terminals, etc (CANES, NMT, GCCS-M, DCGS-N, ...)
- Responsible for DoD's Narrowband SATCOM, Legacy Ultra High Frequency Follow-on Program
- Mobile User Objective System (MUOS)

#### **▼ PEO MLB**



- Navy ERP Financials Services
- Logistics IT Services
- Logistics Integration Information Solutions Services
- Applications Services
- Data Transformation Services
- Enterprise Systems and Services & Innovation Support Services
- Systems realigned from PMW 150
  - Naval Operations Business Logistics Enterprise (NOBLE) program
  - Select in-service systems from Naval Tactical Command Support System (NTCSS)
  - Select in-service systems from Maintenance Figure of Merit (MFOM)

#### ▼ PEO Digital



- Naval Enterprise Networks
- Special Networks And Intelligence Mission Applications
- Navy Commercial Cloud Services
- Special Access Program Networks
- Enterprise Information Technology Strategic Sourcing
- Portfolio Manager Marine Corps Supporting Establishment Systems



## **Executing National and Naval Strategies**



NIWC Atlantic's Execution Plan Aligns to NAVWAR Vision to execute National and Naval strategies

#### All Hands on Deck We can't execute without our technical workforce and industry base

#### **PRODUCT**



Develop and deliver capabilities that expand our information warfare advantage.

#### **PEOPLE**



Recruit, develop and retain a credentialed workforce to meet technical requirements for today and tomorrow.

#### **PROCESS**

Advance efficiency and enhance effectiveness of processes to accelerate capability delivery and improve employee experience.

Partners: Match and deliver the

Navy's demand for new technologies and equipment.

Ensure the growth and health of technical knowledge and skills.

Improve planning and communication. Keep lines of communication open, deliver on time.

an 2021



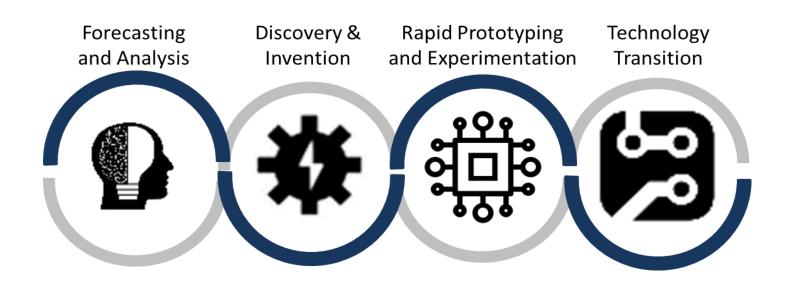
# Delivering within the Full Range of Naval and Joint Operations — Department and Sponsor Alignment

Departments	Major Sponsors		
Fleet C4I and Readiness Greg Lancaster, SSTM	<ul><li>PMW 120</li><li>PMW 130</li><li>PMW 150</li><li>PMW 160</li><li>PMW 170</li></ul>	<ul><li>PMW 740</li><li>PMW 750/760</li><li>PMW 770</li><li>PMW 790</li><li>FRD</li></ul>	<ul><li>NAVSEA</li><li>NAVAIR</li><li>USCG</li><li>Fleet Cyber</li><li>Numbered Fleets</li></ul>
Expeditionary Warfare Ashlee Landreth, SSTM	• USMC • SOCOM	• U.S. Army	U.S. Air Force
Enterprise Systems Patrick Fitzgerald, SSTM	PEO MLB  • PMW 220 PMW 250  • PMM 230 PMS 444  • PMW 240	PEO D&ES • PMW 205 PMW 280 • PMW 260 PMW 290 • PMW 270	<ul><li>NAVSEA 04I</li><li>DISA</li><li>Numerous Small DON Project</li></ul>
Shore C2ISR and Integration Bruce Carter, SSTM	<ul> <li>Defense Health Agency</li> <li>Commander, Navy Installations Command</li> <li>Marine Corps Installations Command</li> </ul>	<ul> <li>Naval Air Systems Command</li> <li>Naval Facilities Engineering Command</li> <li>Defense Logistics Agency Energy</li> </ul>	
Science and Technology Dr. Suzanne Huerth, SSTM	<ul> <li>Defense Advanced Research         Projects Agency (DARPA)     </li> <li>Office of Naval Research (ONR)</li> </ul>	<ul> <li>Office of the Secretary of Defense (OSD)</li> <li>Navy Tactical Exploitation of National Capabilities (TENCAP)</li> </ul>	

May 2021 46



## **Science and Technology Mission**



We are the solutions provider for mission critical information warfare!



# **S&T Structure Supporting Technology Development**

## **People**

Research and Applied Science

Forecasting, Transition, and Assessment

#### Work

Defense Advanced Research Projects Agency (DARPA)

Office of Naval Research (ONR)

Advanced Technology Research (ATR)

Naval Innovative Science and Engineering (NISE)

# Command Support

Office of Research and Technology Application (ORTA)

Human Research Protection Program (HRPP)

Science, Technology Engineering and Math (STEM)

Rapid Prototyping and Exercise

Palmetto Tech Bridge



# 8 Technology Focus Areas (TFAs) to Achieve Technology Goals

Technology
Strategy and
TFA analysis
drives work
acceptance and
lab/facility
infrastructure
allocations and
tools.





**Artificial Intelligence:** Provide warfighters with analytics-driven, data-informed, and technology-empowered capabilities to drive decision advantages and optimal mission outcomes.



**Assured Communications:** Addresses the demand for resilient, and sometimes covert, wired and wireless communications in degraded and/or denied environments.



**Cloud Computing:** IT modernization and digital transformation for resilient infrastructure, platform and software services.



**Cybersecurity**: Provides protection from unauthorized use of and/or defends electronic data, hardware, software from disruption or of the services they provide.



**DevSecOps:** Refers to replacing siloed Development, Security and Operations to create multidisciplinary teams that collaborate with shared and efficient practices and tools.



**Mobility:** Provide Wireless Technology and enterprise access for the warfighter to engage with a mobile environment and applications, anytime, anyplace.



**Model-Based Systems Engineering (MBSE):** Technologies used to support the development, management and application of virtual constructs of varying fidelity across the spectrum of systems engineering.



**On-Demand Manufacturing:** Produce products and/or components, when or as they are required at the point of use, using additive and/or traditional manufacturing methods.

49



## Science and Technology Department

## Science and Technology FY20: 97 FTEs

#### 67 Programs / Projects

- Technical mgmt., research and development, and integration support to develop advanced technologies that ensure technological superiority for the Navy, Marine Corps and Joint Warfighters.
- Develop, motivate and sustain partnerships with industry and academia to expand research opportunities, recruitment and promote technology transfer to/from the private sector.
- Analyze C4ISR and Space systems to identify gaps in capability; assist in strategic roadmaps to future technology development.
- Rapidly prototype and demonstrate capabilities that address emergent Naval technology needs.

#### ▼ Science and Technology Lead Managers

Researching, prototyping and managing advanced technology development ensuring technical superiority

- Defense Advanced Research Project Agency (DARPA)
- The Office of Naval Research (ONR)
- Naval Innovative Science and Engineering (NISE)
- Advanced Technology Research (ATR)



5G Experiments – Leading the Ship-wide / Pier Connectivity experiment at Naval Base Norfolk, VA

#### **Major Sponsors**

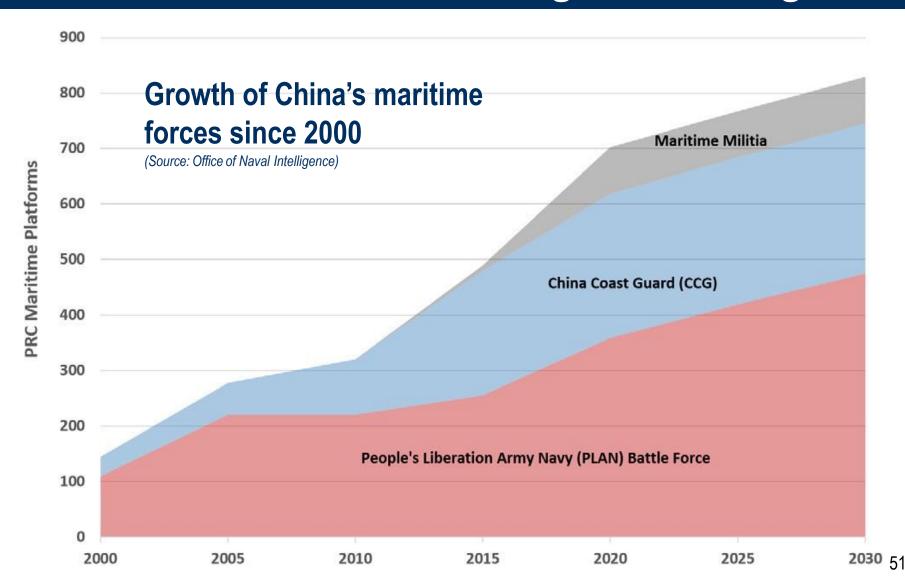
- Defense Advanced Research Projects Agency (DARPA)
- Office of Naval Research (ONR)
- Office of the Secretary of Defense (OSD)
- Strategic Capabilities Office (SCO)
- Deputy Assistant Secretary of Defense (Emerging Capability and Prototyping) (DASD (EC&P))
- Navy Tactical Exploitation of National Capabilities (TENCAP)





Apr. 2021

# Urgency to move faster, take advantage of Innovation and Advancing Technologies



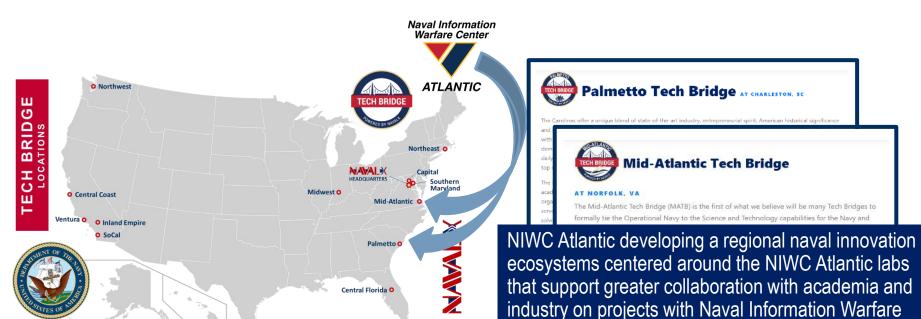


### **Tech Bridges**



NavalX serves as DON workforce "super-connector," focused on scaling nontraditional agility methods across the DON workforce.

▼ The approach is to connect to pockets of excellence to capture and scale the methodologies being employed, increasing awareness of cross-DoD and external successes, lessons learned, and subject matter experts.



relevance



## **Advanced Naval Technology Exercises**

- ▼ Ship to Shore Maneuver Exploration and Experimentation (S2ME2)
  - FVT, FET, 2 projects in attendance
- Urban 5th Generation Marines (U5G)
  - FVT, FET, 4 projects in attendance, 2 Focus Area Leads (C2, UxS), 25 people
- ▼ Fight the Naval Force Forward (FNFF)
  - West 2 Focus Area Leads (C2, UxS), 15 Assessors
  - East Huge support, 10 projects, 3 Focus Area Leads (C2, Comms, UxS), 50+ engineers, 15 assessors
- ▼ Naval Integration in a Contested Environment (NICE)
  - NR&DE Lead, FVT, FET, Commercial Solutions
     Opening (CSO), 9 projects, 4 Focus Area Leads

Exposure to future concepts impacts technology decisions



## Cultivating the Next Workforce & with our Communities

For the THIRD YEAR! Winner **Best Place** to Work!



Career & Science Fairs — Cyber Defense Competitions — Cybersecurity Summer Camp — Distinguished Gentlemen Club — Educators in Industry Program — Essay Contests — Feed the Feds Food Drive — FIRST Robotics Leagues — Geographic Information Systems (GIS) — Girls Day Out — Habitat for Humanity — Lunch Buddies — Navy Family Services — Job Shadows & School Tours — SeaPerch — STEM Festivals — STEM Mobile Apps — Toastmasters — Toys for Tots Campaign — Trident Day of Caring — VA Homeless

In response to COVID-19 **NIWC Atlantic quickly** reorganized the STEM Program to produce first ever virtual events, many open to students across the country

- **Career Fairs**
- STFM Clubs
- Robotics
- **GIS Week**
- Palmetto Cyber Summer Camp
- Girls Day Out Summer Camp
- STEM Mobile Apps / Summer Interns

#### FY20 Community Impact & Volunteerism

- 71,000+ Students Served
- 300+ Volunteers
- 5.100+ Total Hours\*
- 103 First Robotics Teams
- 11 Educational Partnership Agreements















# Serve our Nation by delivering information warfare solutions that protect national security. WIN THE INFORMATION WAR.







NIWC Atlantic is part of the Naval Research & Development Establishment (NR&DE)

Web: <a href="https://www.niwcatlantic.navy.mil">https://www.niwcatlantic.navy.mil</a> Facebook: <a href="https://www.facebook.com/NavalInformationWarfareSystemsCommand">https://www.facebook.com/NavalInformationWarfareSystemsCommand</a>
Twitter: <a href="https://twitter.com/navwarHQ\_Instagram:">https://twitter.com/navwarHQ\_Instagram:</a> <a href="https://twitter.com/navwarHQ\_Instagram:">https://twitter.com/navwarHQ\_Instagram:</a> <a href="https://www.instagram.com/spawarhq/">https://twitter.com/navwarHQ\_Instagram:</a> <a href="https://www.instagram.com/spawarhq/">https://www.linkedin.com/company/spawar/</a> <a href="https://www.glassdoor.com/Overview/Working-at-SPAWAR-Systems-Center-Atlantic-EI\_IE638508.11,41.htm">https://www.glassdoor.com/Overview/Working-at-SPAWAR-Systems-Center-Atlantic-EI\_IE638508.11,41.htm</a>

Employment opportunities: <a href="https://www.usajobs.gov/">https://www.usajobs.gov/</a> NIWC Atlantic Small Business: <a href="https://www.niwcatlantic.navy.mil/for-industry/">https://www.usajobs.gov/</a> NIWC Atlantic Small Business: <a href="https://www.niwcatlantic.navy.mil/for-industry/">https://www.niwcatlantic.navy.mil/for-industry/</a>

NAVWAR Contract Directorate Office: <a href="https://e-commerce.sscno.nmci.navy.mil">https://e-commerce.sscno.nmci.navy.mil</a>





# Naval Information Warfare Center Atlantic ONR/Advanced Technology Research IPT

Charleston Defense Contractors Association
58<sup>th</sup> Small Business and Industry
Outreach Initiative Virtual Symposium
15 July 2021

Dr. Suzanne Huerth, SSTM
Chief Technology Officer
NIWC Atlantic



The ONR/ATR IPT consists of 25+ projects of various sizes. Due to the quantity and classification of the various projects, only a select number are being represented today.



## **Technology Focus Areas (TFAs)**



**Artificial Intelligence:** Provide warfighters with analytics-driven, data-informed, and technology-empowered capabilities to drive decision advantages and optimal mission outcomes.



**Assured Communications:** Addresses the demand for resilient, and sometimes covert, wired and wireless communications in degraded and/or denied environments.



**Cloud Computing:** IT modernization and digital transformation for resilient infrastructure, platform and software services.



**Cybersecurity:** Provides protection from unauthorized use of and/or defends electronic data, hardware, software from disruption or of the services they provide



**DevSecOps:** Refers to replacing siloed Development, Security and Operations to create multidisciplinary teams that collaborate with shared and efficient practices and tools.



**Mobility:** Provide Wireless Technology and enterprise access for the warfighter to engage with a mobile environment and applications, anytime, anyplace



**Model-Based Systems Engineering (MBSE):** Technologies used to support the development, management and application of virtual constructs of varying fidelity across the spectrum of systems engineering.



**On-Demand Manufacturing:** Produce products and/or components, when or as they are required at the point of use, using additive and/or traditional manufacturing methods.



# TFA **Artificial Intelligence**

#### CRIT

- CRIT is a FNC that will provide the USMC with Electromagnetic Spectrum (EMS) situation
  awareness and enhanced defense techniques to support doctrine, organization, training, material,
  leadership and education, personnel and facilities (DOTMLPF). CRIT will be an easy to use tool for
  the Marine Air-Ground Task Force (MAGTF) Combat Operations Center (COC) to understand and
  control the near real-time EMS environment and facilitate technical SIGMAN.
- CRIT Apple is a Cyber-Expeditionary Warfare (EW) Monitoring System that collects own-force RF footprint, processes spectral waveforms, recognizes and classifies waveforms, presents the results in understandable formats, and discovers anomalies

#### Second Trumpet

Develop a robust system with hardware accelerators at its based to power AI/ML approaches to quickly scan, ID, and defeat known and unknown signals. The Second Trumpet (Hardwareaccelerated machine learning for signal detection, analysis, and defeat) will seek to realize significant size, weight, and power gains from the GPP-only version of SPECTRUM CRAWLER (First Trumpet), through the use of ASIC/FPGA/SoC hardware purpose-built for machine learning processing.



# TFA **Artificial Intelligence/Cloud Computing**

#### ▼ Traffic Cop

 A scalable processing infrastructure to execute/recommend decisions for control of IO capabilities integrating multiple sensor systems and platforms with multiple effector systems and platforms.

#### Advanced Motion Platform (Also under AI/ML)

- Rapid development and deployment of advanced GEOINT analysis capabilities to the National System for Geospatial Intelligence (NSG)
  - Building and sustaining a joint framework to enable Computer Vision Algorithms (CVAs) to make a rapid operational impact
  - Updating and enhancing analytical capabilities such as CVAs, data analysis tooling, workflow architecture, etc.
  - Informing the evolution of Motion GEOINT Services (ExServ) architecture, technologies and operational capabilities to support Agency and DoD Service missions



# TFA **Artificial Intelligence/Cloud Computing**

#### Integrated Visualizations for Operations Running in an Information Environment

 Provide a single interface to view and analyze fused social intelligence (SOCINT), open-source intelligence (OSINT), and geospatial intelligence (GEOINT) enabling data exploration, discovery, and visualization to improve decisions through holistic data insight and understanding

#### ▼ Data Focused Naval Tactical Cloud (DF-NTC)

- DF-NTC brings together historical data sources and in-situ data to allow the analyst to assess threat submarine activity, and forecast not only what's possible, but what's likely, using an intuitive heatmap
- Unprecedented access to data is enabling deeper insights by exploiting that data in new and innovative ways, and to apply those insights to improving Naval Operational Intelligence (OPINTEL) for Anti-Submarine Warfare (ASW), Integrated Air Missile Defense (IAMD), Expeditionary Warfare (EXW), and Electromagnetic Maneuver Warfare/Integrated Fires (EMW/IF) missions



# TFA **DevSecOps/Artificial Intelligence**

#### MLOps Data Portal

- Data Scientist focused, web-based utility which enables:
  - Development of datasets to train AI/ML models
  - Creation, editing and duplication of models
  - Ontology mapping
  - Model performance evaluations on real data
  - Alternate RESTful Webservice API available
  - AI/ML training environment directly linked to analyst tools enabling adaptive updates to training data based on analysts decision-making



# TFA Mobility/Artificial Intelligence

#### ▼ 5G to Next G

- Tranche 1 (mobility) HILL AFB
  - Create a proving ground at Hill AFB for testing, refining, and validating deployed 5G technology and Spectrum Sharing capabilities with Coexistence without interference to the airborne radar/or existing military systems
- Tranche 1 JBLM (AV/VR)
  - The JBLM 5G Augmented Reality / Virtual Reality (AR/VR) prototype will provide a secure, 5G Network-enabled capability for realistic AR/VR training in a field environment
- Tranche 1 MCLB Albany (AI)
  - The MCLB Albany 5G Smart Warehouse prototype will provide a secure, open standard 5G environment enabled by O-RAN, automated asset tracking & movement, machine learning, and Zero Trust Architectures over a Shared Spectrum Testbed.



# TFA Mobility/Assured Comms

#### ▼ 5G to Next G

- Tranche 2
  - The second wave of OUSD experiments, or Tranche 2, seeks to develop prototype communication networks to enable rapid experimentation for multi-use applications by leveraging commercially available 5G networks, technologies, and processes to ensure that US forces will have connectivity uniquely suited to any battle-space.



# TFA **CyberSecurity**

#### **▼** MOSAICS

- MOSAICS is an integration of COTS and GOTS technologies for enhanced situational awareness and defense of industrial control systems associated with task critical assets
- What will project do?
  - Demonstrate the ability to baseline control system vulnerabilities and semi-autonomously identify, respond to, and recover from asymmetric attacks on critical infrastructure in mission-relevant timeframes





# Naval Information Warfare Center Atlantic

Charleston Defense Contractors Association 58<sup>th</sup> Small Business and Industry
Outreach Initiative Virtual Symposium
15 July 2021

Mr. Greg Hays, SSTM
Rapid Prototyping, Experimentation, and
Demonstrations (RPED)
NIWC Atlantic



## **Current Naval RDTE Landscape**

- Nearly all the US R&D takes place outside the federal government, whether or not the gov't funds it
  - Less than 25% of R&D in the United States is federally funded (in 1960 it was ~75%)
  - Only 10% of the total US R&D is done by federal government scientists and engineers
- ▼ Valley of Death constant struggle in RDTE investment yielding results (aka transition)
  - Natural disincentive in acquisition to accept tech that is not mature
  - Industry typically does not have an incentive to include Navy funded 6.1-6.3 tech into offering
  - Platform HW & SW infrastructure often not architected to readily accept new tech

#### Future Focus

- Need for Identification, Adaptation, and Implementation of new tech/capabilities faster than our adversaries
- Leverage non-governmental investment to adapt and adopt commercial architectures and open standards
- Break the mindset of vertical system and platform acquisitions to integrate the design and the development of net-enabled kill chains



#### We must expand our reach via to....

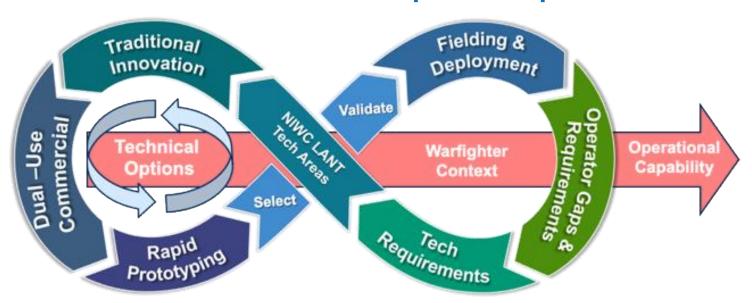
- ▼ Take aggressive steps to establish a culture of experimentation, adaptation and risk-taking
- ▼ Ensure we are employing emerging technologies to meet the warfighter needs
- ▼ Increase speed and agility in the technology development and procurement

<u>Ultimate Goal</u>: Develop a continuous delivery model where invested technology yields results driven by shifting operator demands that can scale while enabling efficiencies and innovation.



#### **TechOps Model**

## Validating the Technical Solution meets Operator Requirement



Recognizing the Right Technical Solution

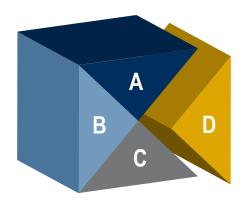
Translate Operator Objectives into Technology Options

### **Continuous Delivery of Speed to Capability**



#### **Fundamentals of the Warfare Center**

#### Mission Centered & Market Smart



- A. Translating Operator Objectives into Technology Options
- B. Recognizing the Right Technical Solution
- C. Validating the Technical Solution meets
  Operator Objective
- D. Passionately Tell the Truth

Markets Define/Customers Shape – Working Capital Fund Biz Model Economy of Scale for Capability Delivery

#### **Key Ingredients:**

- ✓ Ability to hire, train, and retain a high-tech workforce
- ✓ Ability to contract for technical solutions/services
- ✓ Ability to accept work from a diverse customer base to strengthen the tech base essentially a crowdfunding platform for capability!



## **NIWC Atlantic Advantage**

- Other WFC's are highly consolidated and specialized military-industrial complexes
  - Few counterparts forcing them to keep pace with faster-moving commercial markets - ships, planes, and munitions essentially have little commercial competition
- Our business, while unique, is still largely commercially driven, privately developed, and increasing at a pace greater on the outside
- Customers come for the fast incorporation and customization of commercial technology
- ▼ The "speed gene" is in NIWC Atlantic



## Naval Information Warfare Center (NIWC) Atlantic Unique Modern Information Laboratories

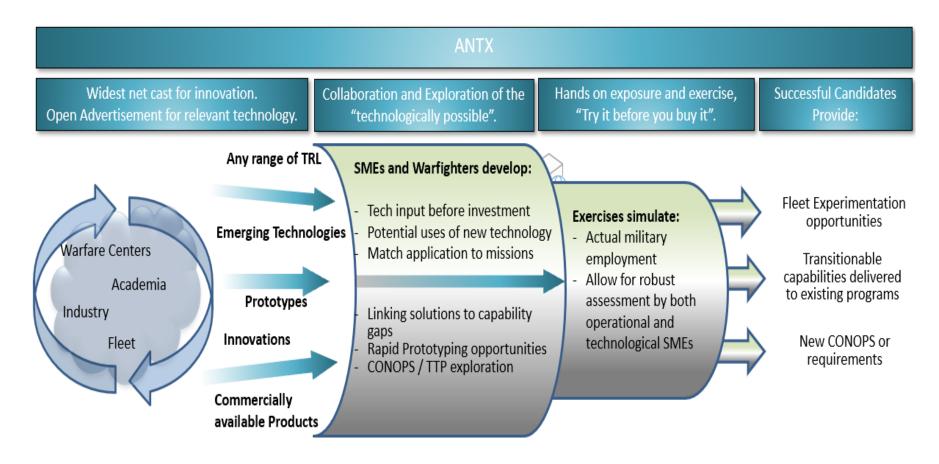
- National Cyber Range Complex (NCRC), Charleston
- Surface Ship Test and Integration Facility
- Common Submarine Radio Room production and testing
- Network Integration and Engineering Facility (NIEF) Atlantic
- NIWC Atlantic National Security Operations Center/ NAVWAR Red Team (NSA, USCYBERCOM and DOD Cyber Red Team Accredited)
- Marine Corps Installations Command Electronic Security Systems
- 5G Communications Capability and Outdoor Optical Range
- Cyber Forensics Criminal Investigations Laboratory
- Cyber Computer Network Defense Laboratory
- DOD Component Enterprise Data Centers and Networks and Satellite Communication Gateways
- Software Defined Radio & RF Testing, Commercial and DOD Satellite Comms production and installation
- Small Autonomous Unmanned Systems Range (SAUSR)
- Seaworthy Artificial Intelligence Lab (SAIL)
- Vehicle C4I systems integration, testing and production facility
- Electromagnetic and Interference (EMI) and Environmental test labs, Poseidon Park EMI Testing
- Global Distance Support Help Desk
- Air Traffic Control systems development and installation





#### **Advanced Naval Technology Exercise Model**

#### **NIWC led/demonstrated technology in Four ANTXs**



"ANTXs are a venue for warfighters, technologists, engineers and sponsors to collaborate and exercise new technology and prototypes prior to government investment. Shape tomorrow's technology today at the lowest resource point practical."



#### **NICE ANTX 2021**

- Naval Integration in a Contested Environment (NICE)
- 10-day Exercise
- Apr. 5-14, 2021
- Camp Lejeune, N.C.

Over 65 emerging technologies were evaluated by the Navy and Marine Corps for future warfighter application

**▼ Working Transitions...** 























#### **Networks Prize Challenge**

<u>First Project Overmatch championed Prize Challenge:</u> focused on discovering advanced networking technologies.

#### **Naval Problem:**

- Seamlessly connect the future fleet of manned and unmanned platforms;
- enable a Navy and Marine Corps that swarms the seas;
- deliver synchronized lethal and non-lethal effects from near-and-far, every axis, and every domain.

<u>Challenge</u>: Seeking innovative technologies that enable efficient, low-overhead routing of application packets to maximize the utility of Naval networks which are characterized by sparsely connected nodes, multi-hops, low kbs links, dynamic and unpredictable connectivity.

#### **Key Dates**:

- 27 Jul: White paper/quads due
- 22 Oct: Networking technology submissions due
- 5 Nov: Demo Day



#### \$100K in Prize Money

NetANTX Challenge | Challenge.gov (cloud.gov)



#### Al Prize Challenge

<u>Project Overmatch championed Prize Challenge:</u> focused on quickly identifying operationally relevant innovations and emerging Al-enabled technologies.

<u>Naval Problem:</u> Seeking innovative Al-enabled technologies to optimize warfighter decision-support at machine speed in operationally relevant maritime environments.

<u>Challenge</u>: Consider a scenario where developers, data scientists, machine learning (ML) engineers, etc., have access to training-quality datasets via the Overmatch Software Armory's (OSA). OSA will provide challenge participants with:

- VDI access to a secure, government-owned commercial cloud
- Pipelined training-quality datasets
- Access to Al tooling, e.g. Anaconda, AWS SageMaker, etc.

#### **Key Dates**:

- 27 Jul: White paper/quads due
- 22 Oct: Al technology submissions due
- 5 Nov: AlNet Advanced Naval Technology Exercise (ANTX)



#### \$100K in Prize Money

NetANTX Challenge | Challenge.gov (cloud.gov)



#### **Future Events and Prize Challenges**

- Networking technologies critical to advancing capability across all Open Systems Interconnection (OSI) layers:
  - application, presentation, session, transport, network, data link, physical
- Rapid deployment of advanced waveforms
- Unmanning C4I architectures for unmanned systems and manned platforms
- ▼ Rapid deployment of automation, machine learning (ML), and artificial intelligence (AI) into tactical applications both afloat and ashore
- ▼ Modern software development pipelines and infrastructure
- ▼ Technologies and approaches for underlying data architectures ...and more



# Ensuring Tech Dominance & Relevant & Relevant & Ready and Prepare and Preventing Tech Surprise



#### 5G to NEXT G

#### Open BAA

The Department of Defense (DoD) has established the "5G to Next G" program to accelerate implementation of advanced wireless communications with applications in both the Continental United States (CONUS) and Outside CONUS regions.

The purpose of this BAA was to solicit proposals from academia and private insdustry innovative approaches to accelerating DoD's experise in 5G, modernize DoD operations, demonstrate the capacity to operate through untrusted indigenous infrastructure and innovate beyond 5G to dominate in upcoming wireless technology standards and 6G.

#### **Operate Through**

The Enabling Secure 5G Operations (5GO) program seeks to provide mission commanders with the capability to operate through 5G communication infrastructures anywhere in the world. 5G networks are on the verge of becoming ubiquitous, but many of these 5G networks cannot be used for Department of Defense (DoD) missions due to insufficient security and resilience assurances. 5GO will develop enhancements and augmentations to 5G network components (e.g., end systems, Radio Access Network (RAN), Core, and Multiaccess Edge Computing (MEC)). Using these enhancements and augmentations, the security and resilience properties of a 5G network will be raised to a level suitable for use by DoD mission operators. Although 5GO is open to any approach that enables a mission to meet its functional and security requirements, 5GO encourages enhancements and augmentations that use zero trust principles.

#### Innovate 5G

This two-step, multi-phase Broad Agency Announcement (BAA) on behalf of the Office of the Undersecretary of Defense (OUSD) Research and Engineering (R&E) 5th Generation (5G)-to-Next G Initiative seeks to enhance 5G technology and invest in Next G technologies participation of industry through and academia/non-profit organizations. Specifically, the Innovate Beyond 5G (IB5G) program within the 5G-to-Next G Initiative seeks to innovate new concepts, technology components and subsystems in key areas that are anticipated to underpin Beyond 5G Department of Defense (DoD) networking operational use cases.



#### **OSD (R&E) 5G**

**Open BAA** SUBMISSIONS Private Industry and Academia **FOCUS AREAS** \$30 **MILLION** AWARDS | GRANTS

**Operate Through** TECHNICAL AREAS \$30 MILLION **AWARDS | GRANTS** 

**Innovate 5G TECHNICAL AREAS** \$12 **MILLION** AWARDS | GRANTS





# Naval Information Warfare Center Atlantic DARPA Project Update

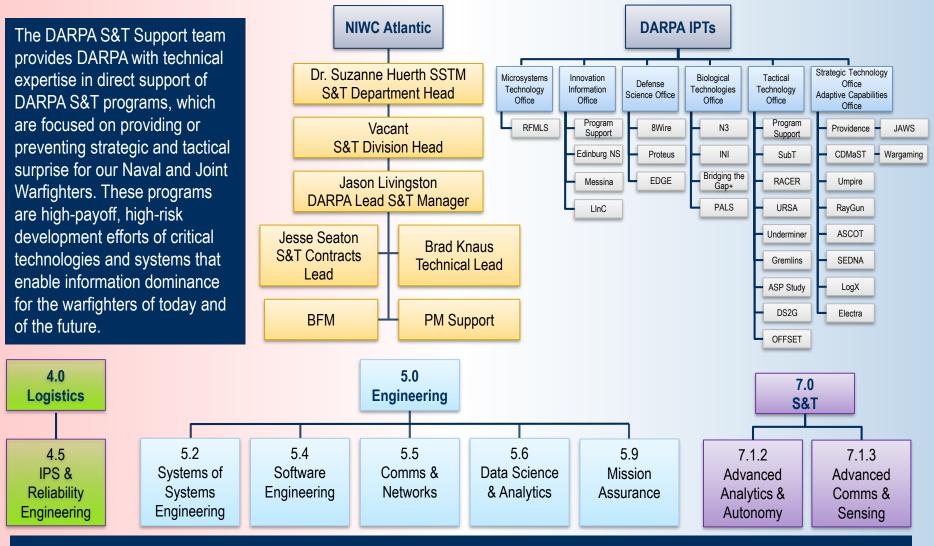
Charleston Defense Contractors Association 58<sup>th</sup> Small Business and Industry Outreach Initiative Virtual Symposium

15 July 2021

Mr. Brad Knaus
NIWC Atlantic
DARPA IPT Tech Lead



#### **NIWC Atlantic DARPA IPT Org Chart**



30+ efforts across the six technology offices with direct Naval Relevance



#### What we do for DARPA

#### ▼ SETA Agent Support

- Tactical Technology Office (TTO)
- Information Innovation Office (I2O)
- Contracting Officer Representative (COR) / Subject Matter Expert (SME)

#### ▼ Broad Agency Announcement (BAA) Agent Support

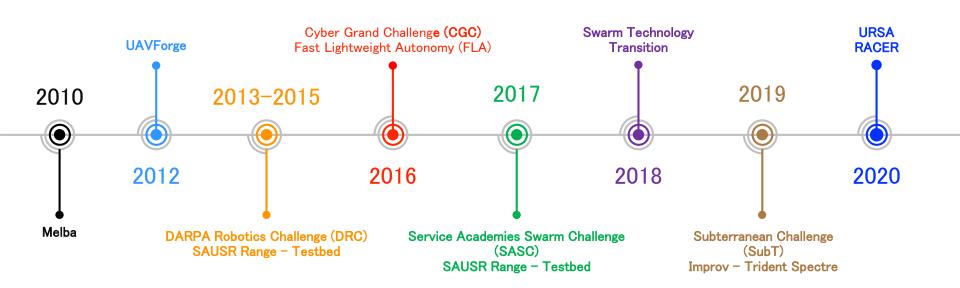
- Multiple offices within DARPA
- Establish contract via BAA Completion
- COR and SME program support
- Tech Transition support

#### ▼ DARPA Program/Challenge Support

- Establish contract via external vehicle, i.e. Seaport NxG
- Provide COR and SME support in an array of domains
- Develop hardware/software, support installation, comms network



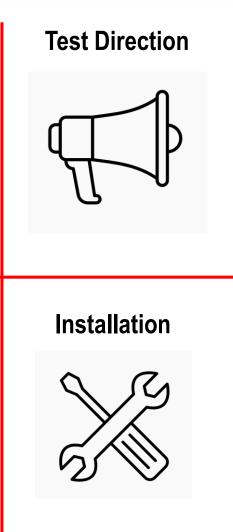
#### **DARPA Programs/Challenges**



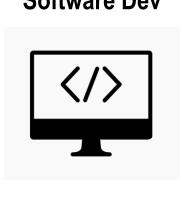


#### NIWC Atlantic Supplemental Contract Support – Focus Areas

# Logistics Event Mgt Production/Media Analytics Software Dev Comms Network











#### **Contract Opportunities**

#### Seaport NxG

Potential partnerships with primes for future work

#### ▼ IWRP – Information Warfare Research Project

- Utilized to support the transition of a DARPA program
- https://www.theiwrp.org/

#### DARPA Small Business Programs Office (SBPO)

- Recognize that innovative ideas can start from small businesses
- Resource to become aligned with DARPA

#### **▼** Contact

Ms. Jennifer Thabet, SBPO Program Director

Email: <u>sbir@darpa.mil</u>

Phone: 703-526-4170



#### **Question and Answers**



#### **Break**





# Naval Information Warfare Center Atlantic

### 2.0 Contracts Update and Contract Forecast

Charleston Defense Contractors Association 58<sup>th</sup> Small Business and Industry Outreach Initiative Virtual Symposium

15 July 2021

Mr. Steve Harnig
NIWC Atlantic
2.0 Contracts Competency Director



#### **Overview**

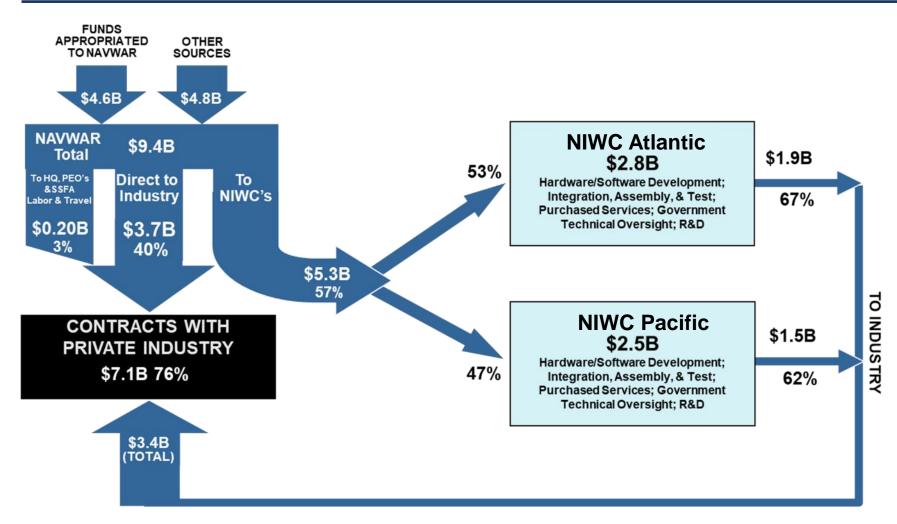
- Opening Remarks
- **▼** 2.0 Contracts Competency
- **▼** 2.0 Contract Strategy
- ▼ Speed to Delivery
- ▼ Industry Forecast
- Questions



#### 2.0 Contracts Competency



#### **MACRO Funds Flow – FY20**

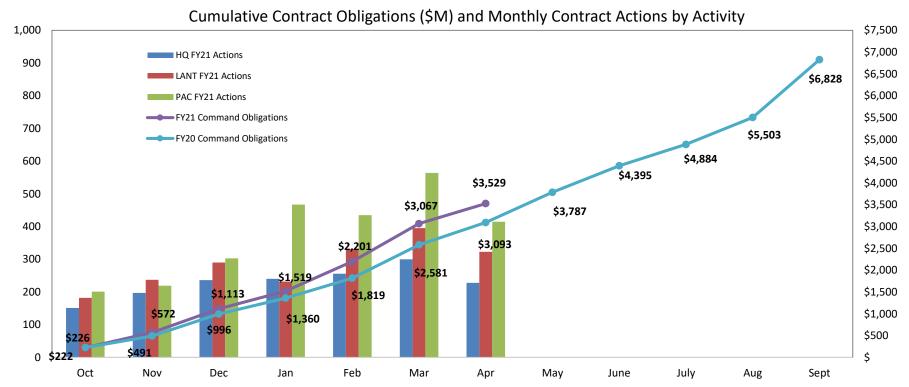


Source: NAVWAR HQ 1.2 Business Analytics Office NOTES:

- NIWC LANT includes Norfolk and NOLA; NIWC PAC includes PAC General Fund (formerly NCTSI)
- Delta between NIWC Inflow and Outflow to industry is primarily associated w/ NWCF Labor Costs



#### **Contracting Actions and Obligations**

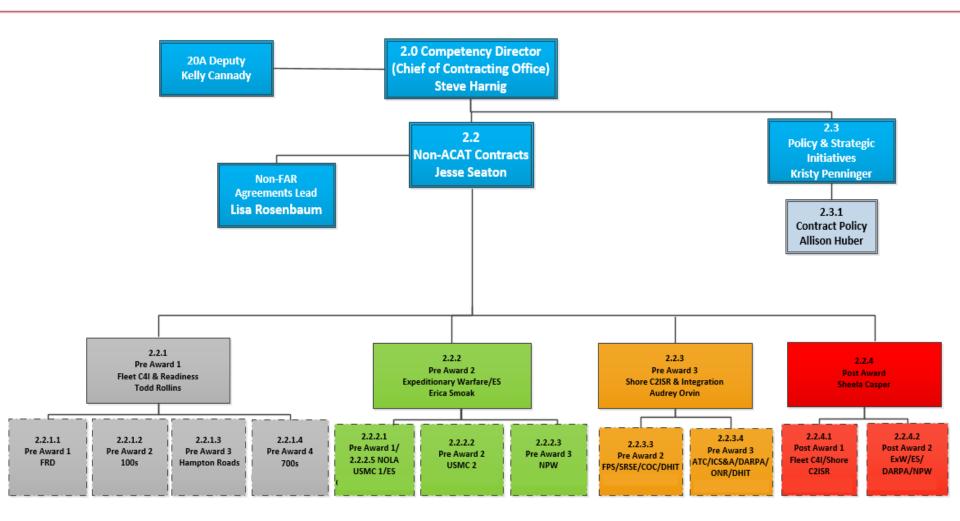


Contracting Office	FY20 Total Obligations	FY20 Cumulative through April	FY21 Cumulative through April
Headquarters	\$3,456	\$1,638	\$1,893
NIWC LANT	\$1,904	\$826	\$913
NIWC PAC	\$1,468	\$629	\$723
Total	\$6,828	\$3,093	\$3,529

Source: FPDS-NG Contract Action Reports (\$M)



#### 2.0 – Contracts Competency





#### 2.0 Contract Strategy



#### **NIWC Atlantic Contract Strategy**

#### **S**ERVICES

General, Corporate Resources/Niche
Service Contracts, Specialized/Complex

**General Services** 

External Contract Vehicles – SEAPORT/ITES (S)

NIWC Atlantic Corporate Resources and Niche

8a Incubator, DARPA, ATC, GIC, AATS, etc...

TS and Above Services & Specialized/Complex Services

**Cyber Mission Engineering, MBAS** and Corporate Ops

#### **SUPPLIES**

General, Corporate Resources/Niche
Supply Contracts, Specialized/Complex

**General Supplies** 

NIWC Atlantic Corporate
Resources and Niche

Specialized/Complex
End Item Deliverables

SEWP/ITES (H)/GSA

IC/IVCS, etc...

**Cyber Mission Systems, Corporate Production, and TTL** 

#### OTHER TRANSACTION AUTHORITY

Information Warfare Research Project

NIWC Enterprise OTA for Rapid Innovation, Prototyping and Fielding



#### **Managing Contract Strategy for the Future**



- ▼ Information Warfare Research Project (IWRP)
- ▼ C2 replacement strategy
- CME replacement strategy
- ▼ Command Strategy
  - Ensure Contract Strategy supports Technical Strategy
    - 5G, Cloud, MBSE, DEVOPS, and NC3
- Category Management
  - Common goods/services vs DoD-centric
  - Best In Class (BIC) Tier 3
  - SeaPort Agency-wide Tier 1 Solution
- ▼ Req't to Consider SeaPort (NMCARS 5237)
  - To satisfy competitive service requirements
  - D&F required to negate use of SeaPort
- ▼ SAC vs MAC
  - D&F required to award single source task/delivery order contract >\$100M (HQ)



#### **Contract Strategy**

MAC

Repetitive

Competitive

Independence

TASKS

Integrally

related

SAC

Agility

#### Requirements

#### Depts. and Mj. Sponsors

#### Fleet C4I and Readiness

- PMW 120
  - PMW 790
- PMW 130
  - FRD
- PMW 160 PMW 170
  - NAVSEA
- PMW 740
- NAVAIR
- PMW 750/760
- USCG
- PMW 770
- Fleet Cyber Numbered Fleets

#### Expeditionary Warfare

- MARCORSYSCOM
- SOCOM
- HQMC
- PEO Land Systems

#### Enterprise Systems

- PFO MI B
  - PMW 150 PMW 220
  - PMM 230 PMW 240
  - PMW 250 PMS 444
- PFO D&FS
  - PMW 205 PMW 280
  - PMW 260 PMW 290
  - PMW 270
- NAVSEA
- DISA
- Numerous small DON projects

#### C2ISR & Shore Integration

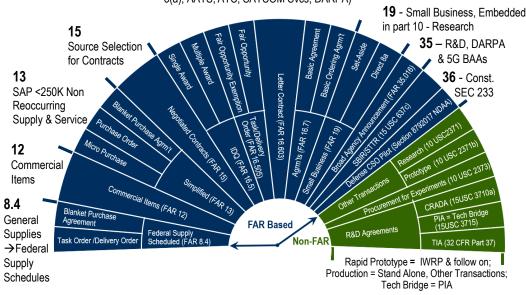
- Defense Health Agency
- Commander, Navy Installations Cmd.
- Marine Corps Installations Command
- Naval Air Systems Command
- Naval Facilities Engineering Command
- Defense Logistics Agency Energy

#### Science & Technology

- Defense Advanced Research Projects Agency (DARPA)
- Office of Naval Research (ONR)
- Office of the Secretary of Defense (OSD)
- Navy Tactical Exploitation of National Capabilities (TENCAP)

#### Solutions Supporting the Departments and Competencies

16 IDIQ . SEAPORT NXG. GIC = Installs Afloat & Shore. Corp. Production = Kitting. Cyber (Services = CME., Solutions = CMS), C2 Supplies (MBAS, Warehouse, 8(a), AATS, ATC, SATCOM Svcs, DARPA)



#### Requirements

#### **Competencies**

- 1.0 Finance: MBAS
- 2.0 Contracts: Corporate Operations
- 3.0 Office of Counsel: N/A

#### 4.0 Log. & Life Cycle Engr.

- 4.1 Sustainment Engr. & Fleet Support
- 4.3 Install. Planning & Execution GIC
- 4.5 Supply Chain Mgmt/Accountable Property - AbilityOne Warehousing Contract
- 4.6 IPS & Reliability Engineering
- 4.7 Production, Quality & Manufacturing Engr. – Corporate Production

#### 5.0 Engineering

- 5.2 System of Systems Engineering
- 5.4 Software Engineering
- 5.5 Communications & Networks
- 5.6 Data Science & Analytics TBD 5.9 Mission Assurance – ISSS Contract
- 6.0 Prog. & Proj. Mgmt.: MBAS
- 7.0 Science & Technology: SFWP and GSA
- 8.0 Corp. Ops: Command Ops.

Contract Strategy supports Technical Focus Areas Developing today for the warfighter needs of tomorrow and bevond. Artificial Intelligence: 5.6 is the Command lead. Strategy is to issue an order or single award contract to acquire specialized skills in this TFA.

Assured Communications: 5G BAAs and IWRP OTs

ASN RDA/DON CIO - prohibition on buying cloud services as part of a larger systems integration or support services contract - We can issue orders against any of the existing cloud vehicles, but we'd have to get PEO Digital's approval if we wanted to issue our own solicitation for a new vehicle.

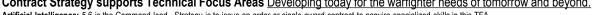
Cybersecurity: Provides protection from unauthorized use of and/or defends electronic data, hardware, software from disruption or of the services they provide. Appropriate to acquire cybersecurity embedded in most of our acquisitions. Historically we have had a Cyber services contract (CME) and a Cyber solutions contract (CMS). Do we need to continue those? Owner in the command is 5.9 – developing there own support contract action.

DevSecOps: Refers to replacing siloed Development, Security and Operations to create multidisciplinary teams that collaborate with shared and efficient practices and tools. Many times these services are embedded in bigger contract actions as well. Strategy could change to modular contracting if the requirements are separated into their own action (small and more agile - iterative). Owner in the command is 5.4.

Mobility: Provide Wireless Technology and enterprise access for the warfighter to engage with a mobile environment and applications, anytime, anyplace. Owner in the command is 5.5. 5G BAAs?

Model-Based Systems Engineering (MBSE): Technologies used to support the development, management and application of virtual constructs of varying fidelity across the spectrum of systems engineering. Appropriate to acquire as an embedded requirement in other actions. 5.2 is the owner for the command.

On-Demand Manufacturing: Produce products and/or components, when or as they are required at the point of use, using additive and/or traditional manufacturing methods. 4.7 is the owner for the Command. Corporate Production or CMS strategy?



Cloud Computing: Our primary strategy for stand alone Cloud services is to utilize the HQ Cloud BPA. Owner in the command is 5.4/5.5. Dec 2020 Navy Cloud Policy coming out of



## 8 Technology Focus Areas (TFAs) to Achieve Technology Goals

Technology
Strategy and
TFA analysis
drives work
acceptance and
lab/facility
infrastructure
allocations and
tools.





**Artificial Intelligence:** Provide warfighters with analytics-driven, data-informed, and technology-empowered capabilities to drive decision advantages and optimal mission outcomes. (Rob Keisler)



**Assured Communications:** Addresses the demand for resilient, and sometimes covert, wired and wireless communications in degraded and/or denied environments. (Ann Rideout)



**Cloud Computing:** IT modernization and digital transformation for resilient infrastructure, platform and software services. (Kathryn Murphy/Ann Rideout)



**Cybersecurity**: Provides protection from unauthorized use of and/or defends electronic data, hardware, software from disruption or of the services they provide (Lonnie "Hank" Osborne)



**DevSecOps:** Refers to replacing siloed Development, Security and Operations to create multidisciplinary teams that collaborate with shared and efficient practices and tools. (Kathryn Murphy)



**Mobility:** Provide Wireless Technology and enterprise access for the warfighter to engage with a mobile environment and applications, anytime, anyplace (Ann Rideout)



**Model-Based Systems Engineering (MBSE):** Technologies used to support the development, management and application of virtual constructs of varying fidelity across the spectrum of systems engineering. (David Smoak)



**On-Demand Manufacturing:** Produce products and/or components, when or as they are required at the point of use, using additive and/or traditional manufacturing methods. (Steve Lariviere)

TFA Champion

Jan 2021



#### Advancing Naval Information Warfare Through Rapid Prototyping on a Global Scale

Mission is to foster collaboration between Government, Industry and Academia to identify, develop and demonstrate the enabling technologies necessary to enhance the Navy and Marine Corps mission effectiveness in the field of Information Warfare.

#### FY20 Total Prototype Awards: 92

(77 LANT / 13 PAC / 2 HQ)

**Total Production Awards: 7** 

IWRP is the first Naval Consortium to have successful prototypes transitioned to production.

#### **Membership Spans 38 States**



Since Oct FY19 1000+ Structured collaboration engagements between industry and the Government Become a member: https://www.theiwrp.org



Non-traditional Industry bases allows access to move innovative capabilities 76%



#### Focused on scaling nontraditional agility methods across the DON workforce

NavalX serves as DON workforce "superconnector," focused on scaling nontraditional agility methods across the DON workforce.

The approach is to connect to pockets of excellence to capture and scale the methodologies being employed, increasing awareness of cross-DoD and external successes, lessons learned, and subject matter experts.



NIWC Atlantic developing a regional naval innovation ecosystems centered around the NIWC Atlantic labs that support greater collaboration with academia and industry on projects with Naval Information Warfare relevance.



#### **Speed to Delivery**



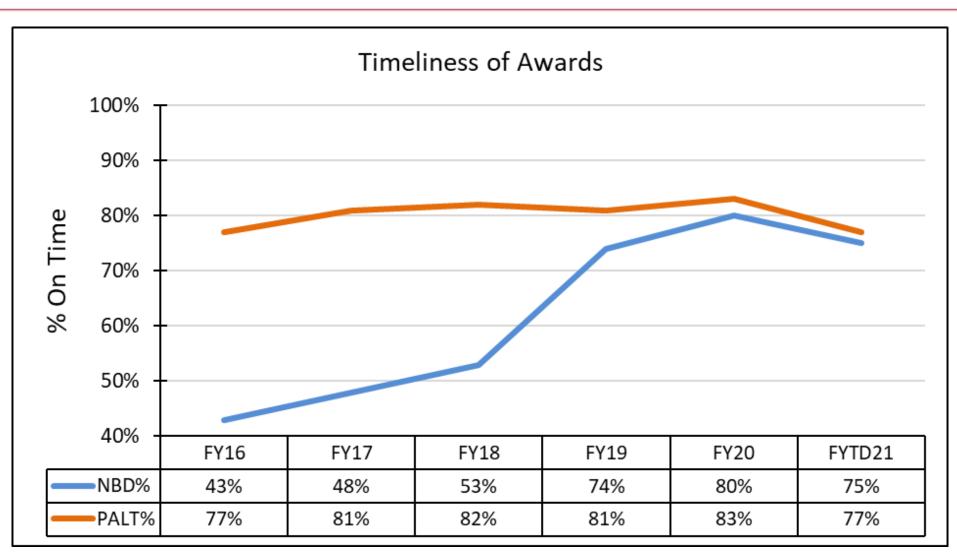
#### **PALT Reductions Realized FY18-FY21**

PALT Code	FY18 PALT	FY19 PALT	FY20 PALT	FY21 PALT	PALT CHANGE (days)
SVC MAC GTE\$25M	266	266	266	266	0
SVC MAC LT\$25M	194	180	180	180	14 🔻
SUP MAC*	115	110	96	86	29 🔻
SAP*	115	110	75	75	40 🔻
SAC (not pre-priced)	75	75	75	60	15 🔻
SVC FOE (Including FOE Mods)	107	90	75	75	32 🔻
SAC (Pre-Priced CLINs)	-	35	35	35	0
ELA	75	75	35	35	40 🔻
Mod – High Complex	65	60	60	40	25 🔻
Mod – Low Complex	45	40	40	20	25 🔻
Mod – Supply	-	-	60	40	20 🔻
ОТА	-	-	180	180	0

<sup>\*</sup>Combined OH & Non-OH Funded in FY20

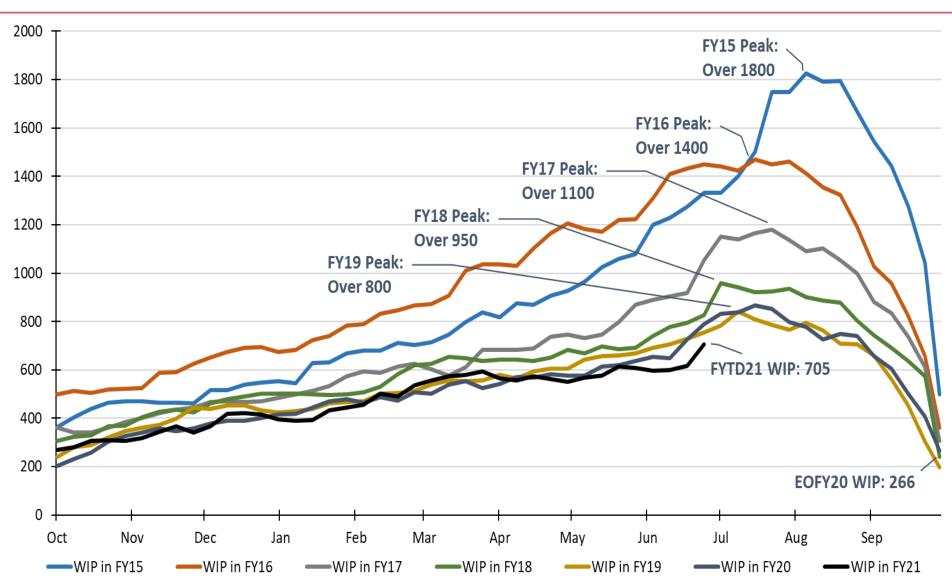


#### **Need By Date & PALT Metrics**





#### **NIWC Atlantic Year-over-Year WIP**





#### **Industry Forecast Report**





## Naval Information Warfare Center Atlantic

Fleet C4I and Readiness (PMW 100s and 700s)

Division 221

**Todd Rollins** 



#### Fleet C4I and Readiness Forecast

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description
Fleet C4I & Readiness - ENTERPRISE SYSTEMS - Afloat Applications Division	1300901750	>=\$10M, <\$50M	Seaport NxG	Feb -22	TBD	MFOM Sustainment
Fleet C4I & Readiness - ENTERPRISE SYSTEMS - Afloat Applications Division	1300889192	>=\$10M, <\$50M	Seaport NxG	Dec-21	TBD	ISEA Business Applications Support
Fleet C4I & Readiness - IA & Navy Cyber Security Division (PMW 130)	1300914863	>=\$50M, <\$100M	Seaport NxG	Aug-22	TBD	Computer Network Defense
Fleet C4I & Readiness - IA & Navy Cyber Security Division (PMW 130)	1300887921	>=\$10M, <\$50M	Seaport NxG	Jun-22	TBD	Crypto and KM Systems Engineering and ISEA
Fleet C4I & Readiness - Navy Afloat Network Division (PMW 160)	1300886448	>=\$50M, <\$100M	Seaport NxG	Sep-21	UNRESTRICTED	Integrated Product Support (IPS), for Command, Control, Communications, Computers, Combat Systems, Cyber, and Intelligence (C6I) Systems



#### Fleet C4I and Readiness Forecast

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description
Fleet C4I & Readiness - Navy Afloat Transport & Navigation Division (PMW 170)	1300932895	>=\$10M, <\$50M	Seaport NxG	Nov-21	TBD	SOFTWARE DEFINED RADIO SOLUTIONS (SDRS) INTEGRATED PRODUCT TEAM (IPT) TECHNICAL SUPPORT
Fleet C4I & Readiness - Surface Ship Integration Division (PMW 750/760)	1300897836	>=\$10M, <\$50M	Seaport NxG	Aug-21	SBSA	IVCS Services Support
Fleet C4I & Readiness - Surface Ship Integration Division (PMW 750/760)	1300879677	>=\$10M, <\$50M	Seaport NxG	Jul-21	UNRESTRICTED	Future Ships Project Support
Fleet C4I & Readiness - Submarine Integration Division (PMW 770)	1300709314	>=\$50M, <\$100M	Seaport NxG	Aug-21	UNRESTRICTED	Subopauth Technical Support





# Naval Information Warfare Center Atlantic

Expeditionary Warfare/ Enterprise
Systems/Non-Department
Division 222

Erica Smoak



## **Expeditionary Warfare (ExW) Forecast**

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description
Expeditionary Warfare - Expeditionary Intelligence Solutions	1300910058	>=\$10M, <\$50M	Seaport NxG	Nov-21	TBD	Marine Corps Intelligence Engineering Sustainment Support
Expeditionary Warfare - Expeditionary Intelligence Solutions	1300877224	>=\$100M, <\$250M	Seaport NxG	Jan-22	UNRESTRICTED	Intel Analysis
Expeditionary Warfare - Expeditionary Intelligence Solutions	1300868974	>=\$50M, <\$100M		Oct-21		Tactical Signals Intelligence (SIGINT) Collection System (TSCS)/Communication Emitter Sensing & Attacking System (CESAS)/Marine Air Ground Task Force Electronic Warfare Ground Family of Systems (MEGFoS) SCI
Expeditionary Warfare - Land Systems Integration (LSI)	1300935861	<\$5M	Seaport NxG	Oct-21	TBD	Mounted Assured Position, Navigation, and Timing (PNT) System (MAPS) Integration



# **Enterprise Systems (ES) Forecast**

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description
ENTERPRISE SYSTEMS - Infrastructure Systems (IS) - Satellite Communications		>=\$10M, <\$50M	Seaport NxG	Nov-21		AC2 Gateway Modem Engineering Support Services
ENTERPRISE SYSTEMS - Enterprise Business Systems		>=\$10M, <\$50M	Seaport NxG	Nov-21		Program Executive Office (PEO) Digital Enterprise Services (DES) Sustainment Engineering and Modernization Support



## **Non-Department Forecast**

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description	
8.0 Competency - Corporate Operations	1300925341	>=\$10M, <\$50M	GSA	Dec-21	TBD	Alarm Systems and Critical Asset Monitoring	





# Naval Information Warfare Center Atlantic Shore C2ISR and Integration Division 223

**Audrey Orvin** 



# **Shore C2ISR and Integration Forecast**

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description
Shore C2ISR & Integration - Air Traffic Control Engineering	1300917282	>=\$10M, <\$50M	ATC Engineering and Technical Support	Jul-21	UNRESTRICTED	CM-300/350 (V2) Radio Replacement and Document Development
Shore C2ISR & Integration - Air Traffic Control Engineering	1300922562	<\$5M	ATC Engineering and Technical Support	Jul-21	UNRESTRICTED	Site UPS integration for AN/GPN-30 Digital Airport Surveillance Radar (DASR) radar systems
Shore C2ISR & Integration - Defense Health Information Technology	1300906114	>=\$100M, <\$250M	Seaport NxG	Jul-21	TBD	Defense Health Readiness Engineering Support
Shore C2ISR & Integration - Force Protection Solutions	1300821720	<\$5M	Seaport NxG	Oct-21	TBD	NAVCONBRIG Sustainment, Miramar/Pearl Harbor



# **Shore C2ISR and Integration Forecast**

Department	PR Number	Est Value	Contract Vehicle	RFP Pending	SB Set Aside Status	General Description
Shore C2ISR & Integration - Force Protection Solutions	1300918557	>=\$5M , <\$10M	Cyber Mission Systems, Kitting, and Supplies (CMS)	Jul-21	TBD	Master (MST) Multiple (MUL) U.S. Marine Corp (USMC) Electronic Security Systems (ESS) East Coast (EC) FY21
Shore C2ISR & Integration - Force Protection Solutions	1300915950	<\$5M	Cyber Mission Systems, Kitting, and Supplies (CMS)	Jul-21	SBSA	NCR Operations Facility ESS Upgrades
Shore C2ISR & Integration - Force Protection Solutions	1300916021	<\$5M	Cyber Mission Systems, Kitting, and Supplies (CMS)	Jul-21	SBSA	Federal Building Operations ESS Upgrades
Shore C2ISR & Integration - Force Protection Solutions	1300915949	<\$5M	Cyber Mission Systems, Kitting, and Supplies (CMS)	Jul-21	SBSA	Executive Access Control Upgrades
Shore C2ISR & Integration - Air Traffic Control Engineering	; 1300820835	<\$5M	ATC Engineering and Technical Support	Jul-21	UNRESTRICTED	Kuwait Towers Services



## **Question and Answers**





# Naval Information Warfare Center Atlantic Small Business Update

Charleston Defense Contractors Association
58th Small Business and Industry
Outreach Initiative Virtual Symposium
15 July 2021

Ms. Robin Rourk
NIWC Atlantic
Deputy Director, OSBP



# DOD Office of Small Business Programs (OSBP) Update

#### ▼ New Director, DOD OSBP – Mr. Farooq Mitha

Prior to his appointment Mitha served on the Biden-Harris transition team as a member of the DoD Agency Review Team. He also served in the Obama administration as the Senior Advisor to the Director of the DoD OSBP and the Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy.



#### ▼ OSBP and NIST partnership

DOD OSBP, the principal advisor to the Secretary of Defense on small business matters, and U.S. Department of Commerce National Institute of Standards and Technology Hollings Manufacturing Extension Partnership Program signed a memorandum of agreement on May 02, 2021 to collaborate on strengthening the national security of the small business industrial base. IMMEDIATE RELEASE

Partnership Expands Opportunities for New and Small Businesses to Work With the Department of Defense, Expand National Security Innovation Base

MARCH 31, 2021

#### The new partnership

- links two DOD organizations with a common mission to assist small businesses and to achieve shared objectives.
- Provide training and technical support to small-and-medium U.S. manufacturers engaged or planning to engage with the defense sector.



# Direct Final Rule: Extending HUBZone Map Freeze

#### 86 FR 23863

- ▼ Extends the HUBZone Map freeze until June 30, 2023
  - Qualified census tract data using the 2020 Census results will not be available until late 2022.
  - All current Redesignated Areas and Qualified Base Closure Areas, and most current Qualified Disaster Areas, will maintain such designation until June 30, 2023.
  - When SBA receives the Census data from HUD, SBA will post a list and/or produce a beta map identifying all areas designated as Qualified Census Tracts, Qualified Nonmetropolitan Counties, and Redesignated Areas under the 2020 Census data, so that firms can begin to plan accordingly.
  - HUBZone Map and certification approval letters will not be updated to reflect the new expiration date of those Redesignated Areas, applicable Qualified Disaster Areas, an Qualified Base Closure Areas scheduled for expiration in 2021, until the effective date of the direct final rule: June 21, 2021.

Published May 5, 2021 Comment period closed June 4, 2021 Effective June 21, 2021



# Proposed Rule: Update of HUBZone Program

- ▼ This proposed FAR rule removes obsolete text and updates terminology and processes to correspond with SBA changes made back in November 2019 to reflect current policies on HUBZone program regulations found in 13 CFR 126.200 and in the Dynamic Small Business Search (DSBS).
- ▼ HUBZone status protests procedures at FAR 19.306 are revised as follows:
  - To specify who may protest the prospective contractor's HUBZone status for HUBZone sole-source awards;
  - To ensure that the Director of SBA's HUBZone program will determine whether a protested concern has certified HUBZone status;
  - To remove the concern's HUBZone status in DSBS if SBA upholds the protest; and
  - To add references and procedures for filing protests against a HUBZone joint venture.

Published June 14, 2021 Comment period closes August 13, 2021



### **HUBZone 2020 Changes and Benefits**

2020 Change	Benefits				
Contracting officers are no longer required to verify a firm's eligibility at the time of award, only at the time of offer.	A firm certified at the time of an initial contract offer will generally be considered a HUBZone small business throughout the life of that contract.				
	This removes the former requirement of having to verify a firm's HUBZone eligibility a second time (at the time of award).				

- ▼ Tip: Use the spreadsheet eligibility calculator tool to ensure you meet the program requirements.
  - Most firms are denied certification because they don't meet the 35 percent HUBZone residency and/or principal office requirements or fail to provide sufficient verification.
  - Use this <u>calculator</u> to check your eligibility before you apply.
  - Save and submit this document with your application to expedite the review process.



# **HUBZone 2020 Changes and Benefits**

2020 Change	Benefits				
Firms are required to recertify annually and undergo a program examination at least every 3 years.	Once HUBZone-certified, a firm is eligible for all HUBZone contracts for which it qualifies for a period of 1 year.				
	Firms are no longer required to report to SBA throughout the year if they have a change in eligibility status; they only have to demonstrate compliance as of their annual certification anniversary.				
	Exceptions include:     Involvement in a merger or acquisition; or     If HUBZone residency falls below 20 percent while performing a HUBZone contract.				



#### **HUBZone 2020 Changes and Benefits**

#### **Annual Recertification**

The new HUBZone regulations require all certified HUBZone firms to recertify annually that they remain in compliance with the program's requirements as of the anniversary date of their certification.



If a firm fails to recertify within the required time frame, SBA will propose the firm for decertification.



#### Category Management (CatMan) Updates

#### ▼ The Numbers

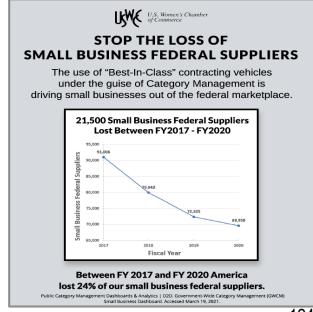
- From 2016 to 2019 cumulative spend in Best in Class (BIC) contracts doubled from \$21B to \$44B\*
- 28% of all contracts were awarded to Small Business\*
- From 2017 to 2020, approximately 24% of the SB Federal Industrial Base has dropped out of the market\*\*
- Asserts larger contracts go to fewer firms\*\*
- ▼ DON Category Management Tiered contract solutions (not all inclusive):
  - Seaport NxG
  - NGEN
  - GIC

**k** Performance.gov

\*\*https://www.uswcc.org/stop-the-loss/

"Category Management" refers to the business practice of buying common goods and services as an enterprise to eliminate redundancies, increase efficiency, and deliver more value and savings from the Government's acquisition programs." (Margaret M. Weichert; Category Management— Making Smarter Use of Common Contract Solutions and Practices).

OMB M-19-13





#### **Questions? Reach out!**

## Visit the NIWC Atlantic 'For Industry' public page for helpful information. <a href="https://www.niwcatlantic.navy.mil/for-industry/">https://www.niwcatlantic.navy.mil/for-industry/</a>

#### ▼ NIWC Atlantic OSBP Contact Information:

- General mailbox <u>ssclant.osbp@navy.mil</u>
- Robin Rourk, Deputy Director, OSBP <u>robin.rourk@navy.mil</u>
- Elizabeth Cecchetti, Small Business Professional, OSBP elizabeth.cecchetti@navy.mil

#### NAVWAR Opportunities:

- NAVWAR, NIWC Pacific and NIWC Atlantic opportunities can be found on our e-commerce website
  - https://e-commerce.sscno.nmci.navy.mil/ Under NIWC Atlantic you will find our solicitations, market surveys, special notices and other information.
  - Task Order Forecast and Long Range Acquisition Forecast are located under the "News tab".

#### NavalX:

- Establishes connections between government and industry by leveraging our suite of digital products to share knowledge and accelerate innovation.
- Digital Engagement Platform built by NavalX <a href="https://navalx.navy.mil/dep">https://navalx.navy.mil/dep</a>

#### ▼ Department of Navy OSBP:

- YouTube Channel view "How to conduct business with the Navy and Marine Corps: https://youtube/0y4\_pMA3\_YM
- Department of Navy OSBP website and webinar series https://www.secnav.navy.mil/smallbusiness/Pages/default.aspx



## **Question and Answers**



# Ms. Camila Anderson Co-Chair, CDCA Small Business Committee

**Closing Remarks and Announcements**